

*The January*  
TECHNOLOGY  
REVIEW



*Frank A. Bourne*

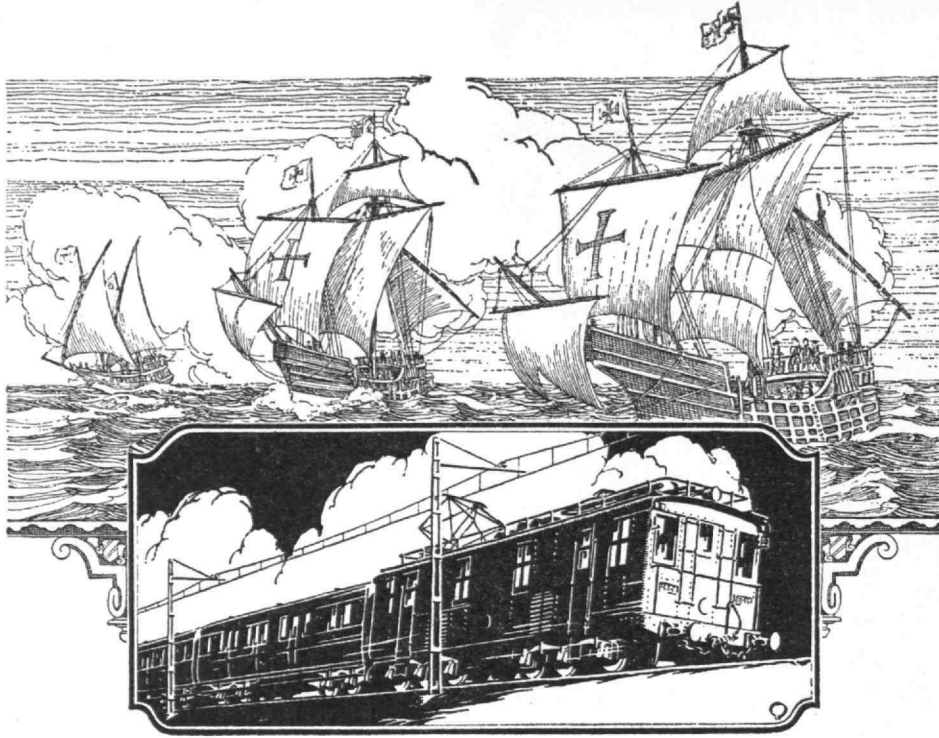
RELATING TO THE MASSACHUSETTS  
INSTITUTE OF TECHNOLOGY

# technology review

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To temporarily change the subject from the new H-P-M "HI-SPEED" Presses for metal working service (started last month), I want to tell those of you interested in Chemical Process industries of a new and equally important press development recently perfected in your line.

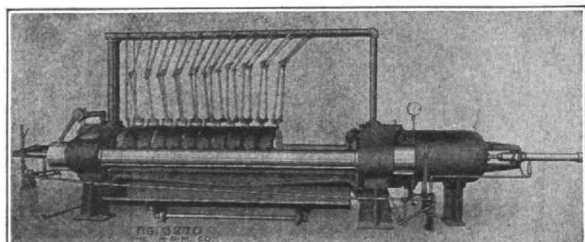
You will agree that the mechanical separation of liquid and solid portions of materials is an important type of operation in your broad field. How about the many cases where filtration does not carry the separation far enough to be economically practical? Then it is essential to rework the filter cake by drying, heavy pressing, or other means. That involves extra labor and expense in re-handling, of course.

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I will be glad to discuss with any of you the application of our new system to any separation problem which appears to come in the class indicated. This may provide the means of cutting your production cost, besides improving results. Let's talk it over.



Yours for Tech.

*Howard F. MacMillin*  
II-21.

Howard F. MacMillin,  
Vice-Pres. in charge of Sales,  
The Hydraulic Press Mfg. Co.

# The TECHNOLOGY REVIEW

Relating to the Massachusetts Institute of Technology

VOLUME XXX

NUMBER 3

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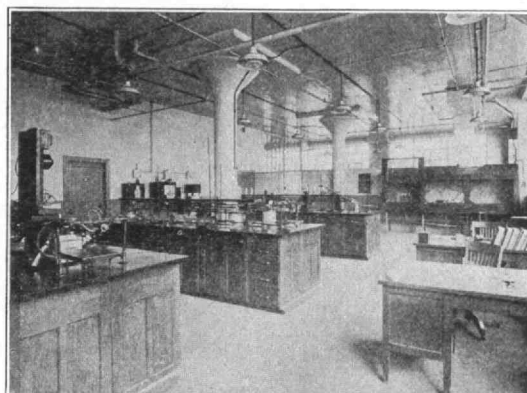
## In THE REVIEW for February

❑ PROFESSOR FREDERICK K. MORRIS, a member of the Roy Chapman Andrews Asiatic Expedition, will discuss, not dinosaur eggs, but the racial characteristics of the Chinese. A number of pen and ink sketches by the author will accompany the article.

❑ WITH the Chinese question greatly clarified, the Review Reader will then be transported to Venezuela for a Model T expedition conducted by Walter L. Whitehead, '13, and William F. Jones, '09 over the Andes and across the llanos.

❑ AND to be sure there will be the usual departments, including Undergraduate Affairs. The fourth of the series of intimate biographies of Class Secretaries will also appear.

## SIMPLEX CABLES

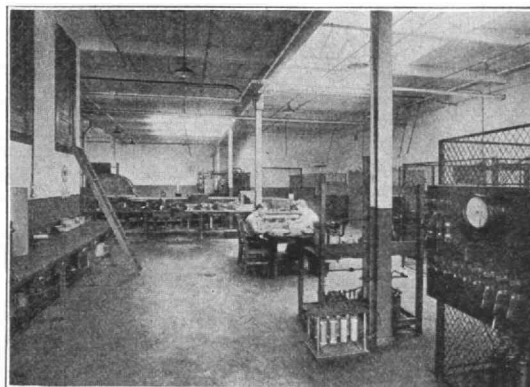


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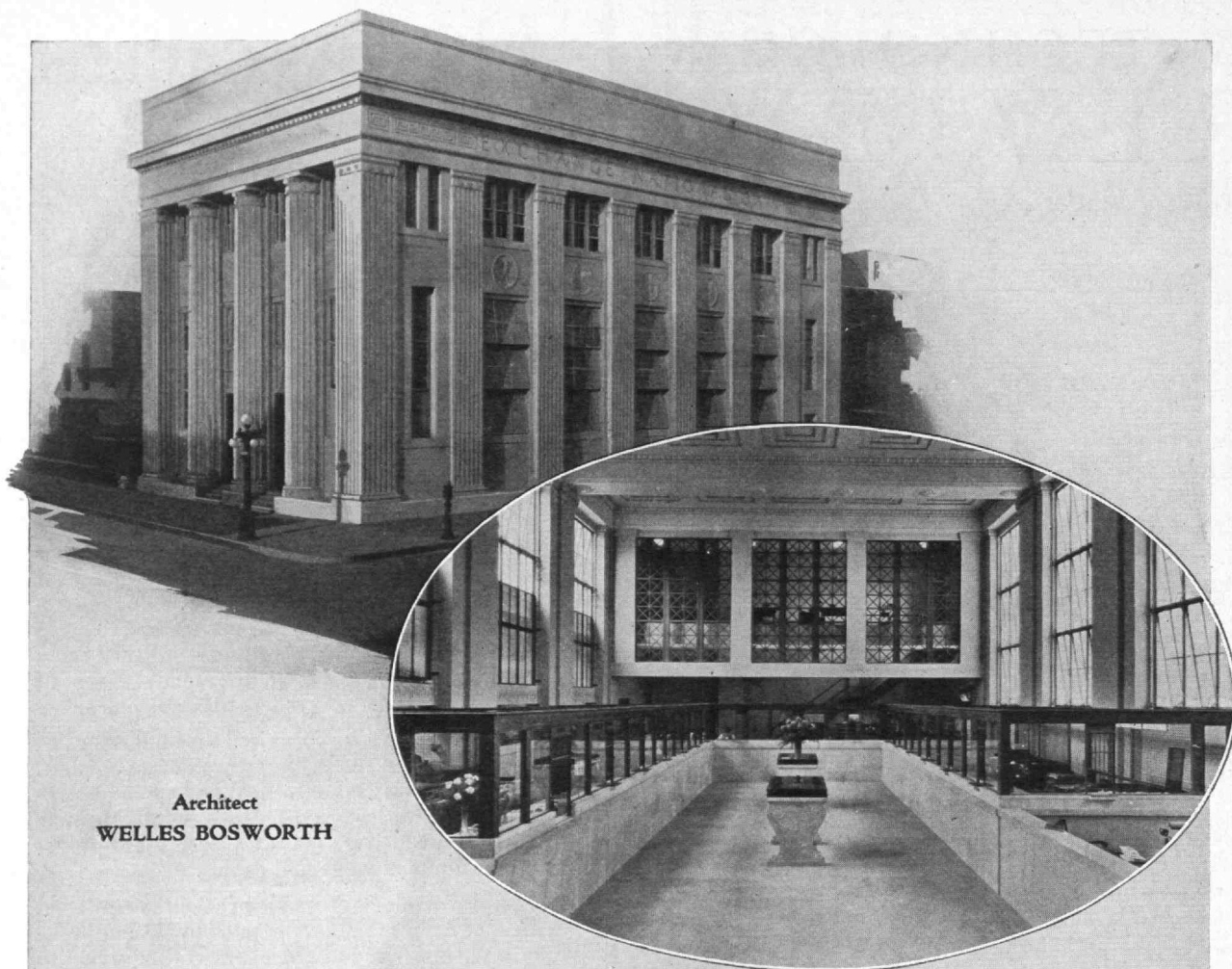
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Architect  
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# The TECHNOLOGY REVIEW

VOLUME 30

JANUARY, 1928

NUMBER 3

## The Trend of Affairs

MILLIONS of years ago the waves of the ocean rolled over what is now the location of Technology, and it is quite possible that the primitive and long extinct crustacean known as the trilobite wiggled its way over the very land where the geological expeditions of Major Albert S. Smith, Superintendent of Buildings and Power, now carry on their experiments in clam shells and cinders.

The watery past of the land where the buildings of the Institute now stand was described by Dr. Hervey W. Shimer, Professor of Paleontology in the Department of Geology, in the first of the season's Popular Experimental Science lectures given on December 16, 17 and 18, under the auspices of the Society of Arts.

Speaking on the "Geologic History of Boston and Vicinity," Dr. Shimer described the geological evolution of Eastern Massachusetts, its vanished mountains and glaciers, and its changing form of life. Some 3,000 to 5,000 years ago, he explained, this region had a climate as warm as that of the present littoral of Virginia. This, he said, is indicated by the numerous marine shells, including oysters nine inches long, which are enclosed in the old muds under Boston. He recalled, too, that subway construction in front of Rogers Building on Boylston Street, revealed the lower portion of an ancient fish weir, proving the presence of man well advanced in the mechanical arts and crafts.

A few thousand years earlier the entire region was covered with ice. During this period the musk ox and huge elephants with hairy coats roamed the land while walrus lived in the ice fields off the coast. Here, also, in the Tertiary period, was found the foot-high Eohippus, ancestor of the horse, camels

and various types of rhinoceroses. At an earlier period the region was populated by vast numbers of reptiles, especially dinosaurs and reptiles which winged their way through the air. At a still earlier period when the land was covered with tree-fern and club-moss forests, which in Nova Scotia and Rhode Island formed coal beds, dragon flies and cockroaches abounded.

Tracing the records of the rocks, Dr. Shimer described how the present appearance of the land came into being. At the beginning of the Cambrian period, some 500,000,000 years ago according to radio-activity methods of reckoning, the ocean waters flowed over the Boston area, then a level region of crumpled schists, and remained there for some millions of years. During that period thousands of feet of sands, muds and limestones were deposited in the ocean.

This region, as well as large areas to the north and south, was raised out of the ocean and folded into mountains and during the process molten diorite penetrated to great depths. Later the area between the Arlington and Swampscott hills to the north, and the Blue Hills to the south gradually sank as a great fault block, forming the Boston Basin. During the succeeding Mesozoic period the entire region was worn down to a level plain, then raised without faulting or folding. Subsequent weathering developed a valley in the Boston Basin as the rocks at the surface were softer than the granites and diorites to the north and south. A slight rise of the ocean in the early Pleistocene period caused a folding of a part of the valley forming Boston bay. Then over the region came the great glaciers from the north to melt back after thousands of years, leaving the country covered with the lakes, swamps, and irregular hills of today.



DWIGHT F. DAVIS

*Secretary of War who will be one of the speakers at the Annual Dinner of the Alumni Association, January 7*



## Prosperity in Cathay

ALL is not chaos in China. The country is like one of its own beggars, outwardly ragged but internally prosperous, says Frederick K. Morris, recently come to the Institute as Assistant Professor of Structural Geology from an experience as a member of the Third Asiatic Expedition of the American Museum of Natural History to the Mongolian Desert of Gobi.

From 1920 to 1925, Professor Morris was in either China or Mongolia, and for eighteen months preceding the Third Expedition he was organizing and supervising the Department of Geology at Pei Yang University in Tientsin. He learned to speak fluently the language of the northern provinces, and consequently was able to make intimate contact with Chinese conditions. The Second and Third Asiatic Expeditions, of which Roy Chapman Andrews was the leader and Professor Morris one of the geologists, discovered, it will be recalled, many evidences of former life in romantic Gobi, including the now famous eggs of the dinosaur.

"Factories are springing up in China," says Professor Morris, "some of the railroads are prospering, especially in Manchuria, and new land is coming under the plow. But with the spread of industrialism in China, there has

come the inevitable increase in population and a demand for more food and raw material, an increasing proportion of which must be imported."

Referring to the prevalence of news of internal strife in press dispatches from the Far East, he says that civil warfare is not new in China's history. Nor is the swaying of vast numbers of the people by propaganda new, and recently the ammunition of her competing war lords has in some cases been propaganda rather than cartridges. He relates a story of how he met a well-educated Chinese who was upon a thousand-mile journey, carrying with him a suitcase filled with propaganda that ranged from a simple once-folded sheet to bound books containing statistics and historical data suited to the intelligence of the coolie or the well-educated Chinese. The spread of communistic propaganda in China has been carried on by the Chinese themselves more actively and successfully than by Russians.

"To understand China we must correct erroneous impressions, for China is not peopled with New Englanders. Instead, they are a racially different people, with their own physical and mental characteristics, and their own talents, capacities, and defects. Christianize them, if you believe it will pay, but never expect Europeans as a result; educate them, yes, but do not look for other than educated Chinese.

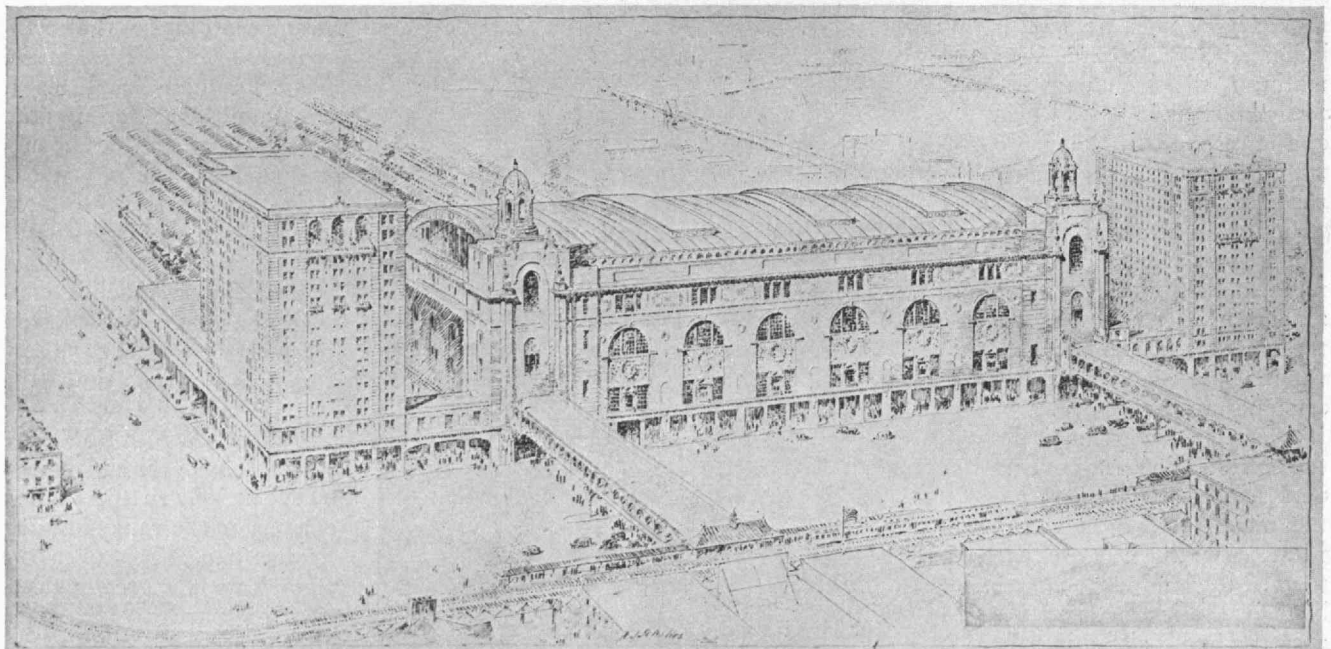
"No matter how earnestly we wish to aid China 'to get to her feet,' we shall fail of our purpose if we proceed under a false theory — a misunderstanding of what is happening there. Those who blame England or Russia for the situation are like the blind man who felt the elephant's trunk and said he was shaped like a rope."



*Christian Science Monitor*

### CHINA HIS SUBJECT

*Professor Frederick K. Morris, sometime Professor at Pei Yang University in Tientsin and a geologist on the Second and Third Asiatic Expeditions*



### FROM THE RIDICULOUS TO THE SUBLIME

*The old North Station, terminal of the Boston and Maine Railroad, is now being razed to permit the erection of the above structure. See the opposite page*

## Architectural Ingenuity

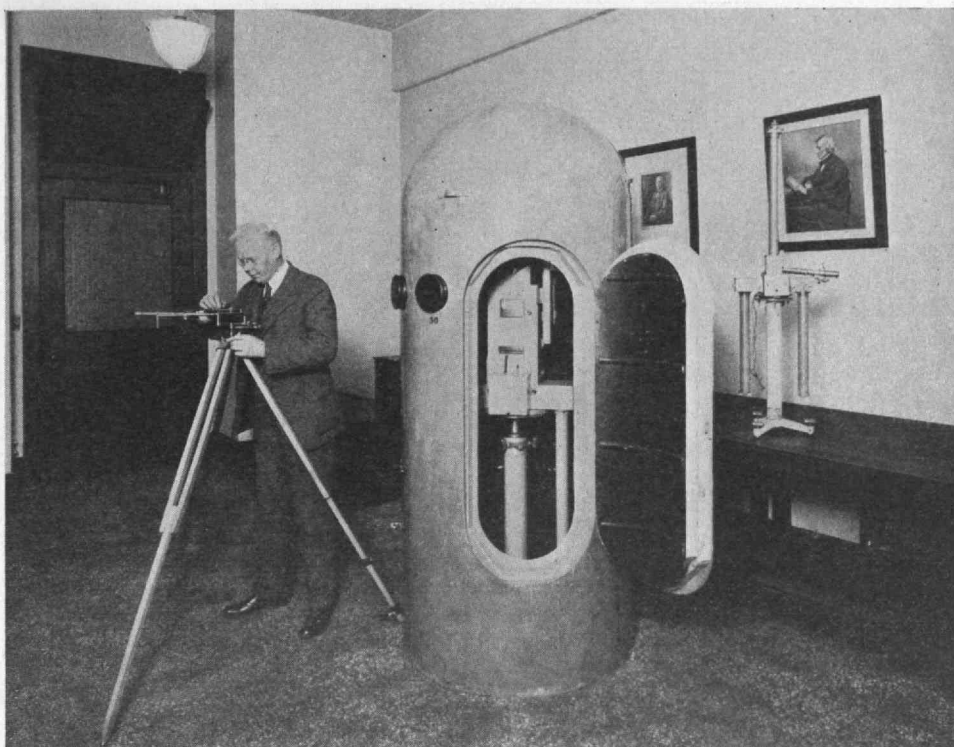
IT had been decided that the Society of Beaux Arts Architects should have a new building. Forthwith a dangerous difficulty, nay a near impasse, presented itself all wreathed in figurative gargoyle grins to President Kenneth M. Murchison. Who was to design this building? What with the eligible New York architects all members of the Society, who dare discriminate in favor of any one of them?

Not abashed one whit, President Murchison plunged into Solomonic thought and soon emerged triumphant. A competition *en loge!* Whereupon members were notified, old and young, important and unimportant, that on a certain day at a certain place they were to present themselves at noon equipped with T-squares, triangles, drawing boards, and other bare necessities. Those who answered the summons to enter the competition were to pay a fee of twenty-five dollars toward the general building fund. Those who did not enter were to pay thirty-five dollars. And not least among the usufructs, the winner of the competition was to be the architect of the new building.

At the appointed hour, some forty architects, presented themselves, as in manner probably they had not done since student days. Four mighty hours they worked without benefit of study, or office force, or other aids to architecture. The end of the period found a committee of judges on hand,—dignified heads of the architectural departments of several colleges—and without delay they appraised the designs of the new building's façade. The winner, they announced at the Society's Annual Dinner, was Frederic C. Hirons, '03, a winner in 1904 of the Paris Prize, and now a practicing architect in New York. And so Mr. Murchison, Mr. Hirons and all the rest went on their way satisfied and rejoicing.

## Gare du Nord

THE new North Station of the Boston and Maine Railroad at Boston, now under construction, one of the largest terminal developments in the world, including as it does a great coliseum, sports arena, hotel, and an office building was designed by Funk and Wilcox, Inc., of which George C. Funk, '05, is a member, and will be built by Dwight P. Robinson ['92] and Company, Inc.



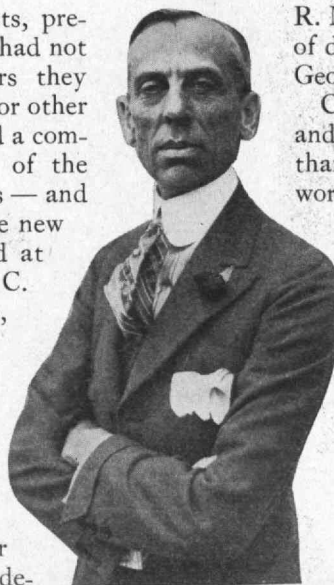
A DIVINING ROD OF SCIENCE

*The weirdly-shaped case houses one of the two torsion balances, used for detecting oil, recently given to the Institute by the Geo-Physics Corporation. Professor William S. Hutchinson, '92, Head of the Department of Mining and Metallurgy stands by*

The new terminal is scheduled to be ready by next July and the coliseum and sports arena will be completed late in the autumn. The coliseum will have a seating capacity of 18,500, which is equal to that of Madison Square Garden in New York. It has been leased to a corporation of Boston and New York business men and sportsmen, including John R. Macomber, '97, chairman of the board of directors, Matthew C. Brush, '01, and George L. (Tex) Rickard.

Construction of the passenger terminal and the coliseum, which will cost more than \$4,000,000, has been started, while work on the hotel and office building will begin within a few months. The total cost of the terminal development with a railhead of twenty-three tracks will be approximately \$10,000,000.

The new station will have a frontage of 700 feet, facing on a street which will be widened to 110 feet. The hotel will stand at the western end of the terminal structure and the office building at the eastern end. The great concourse, 512 feet long, will be separated from the tracks by an ornamental grill and glass partition, and all baggage will be carried to trains on overhead ramps, thus eliminating the inconvenience of trucking on passenger platforms. The waiting

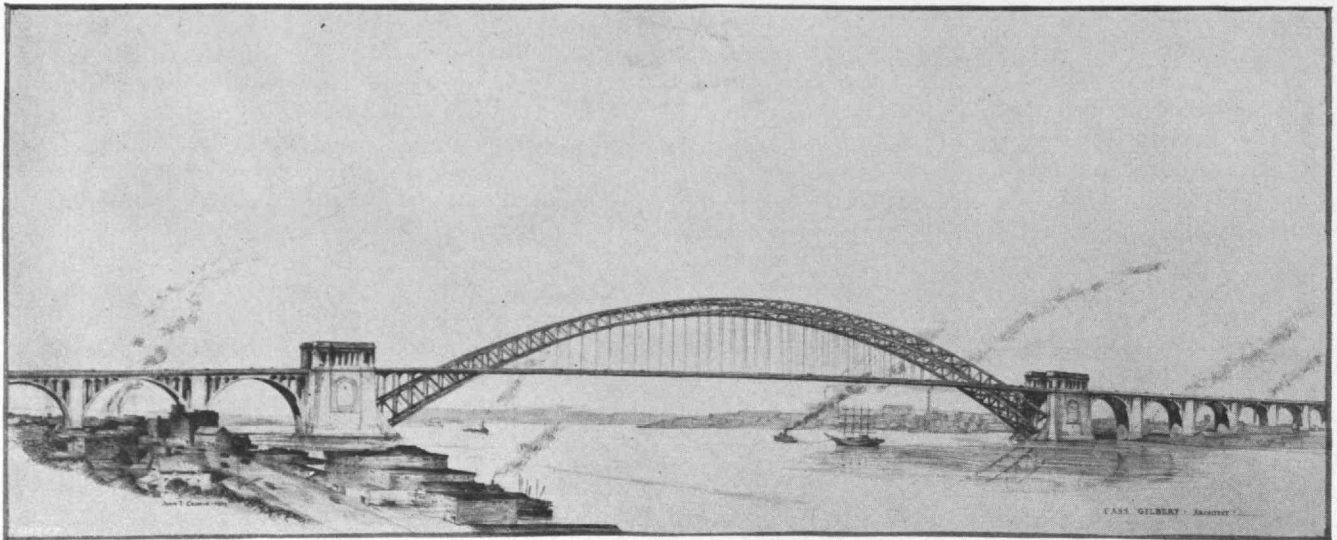


International

## MELON CUTTER

*General Motors cut a \$65,250,000 melon recently. Alfred P. Sloan, Jr., '95 is President*





KILL VON KULL BRIDGE

*Proposed connection between Bayonne, N. J., and Port Richmond, S. I. The architect is Cass Gilbert, '80, and the rendering is by John T. Cronin, '17*

room will have seats for 500 passengers in comparison with a seating capacity of 300 in Grand Central Terminal in New York. In designing the terminal, the architects, with whom were associated as consulting architects, Feldhimer and Fields of New York, have placed the train platform, concourse and waiting room on the same level, an arrangement found in few stations in the country. Ramps will lead from the waiting room and concourse to the mezzanine floor which will have connections by ornamental bridges with rapid transit stations of the street railway.

The coliseum will have a floor space 250 feet long and 125 feet in width, with a full height of 90 feet above the station level. Special equipment will provide ice for hockey and public skating in four hours and remove it in an hour.

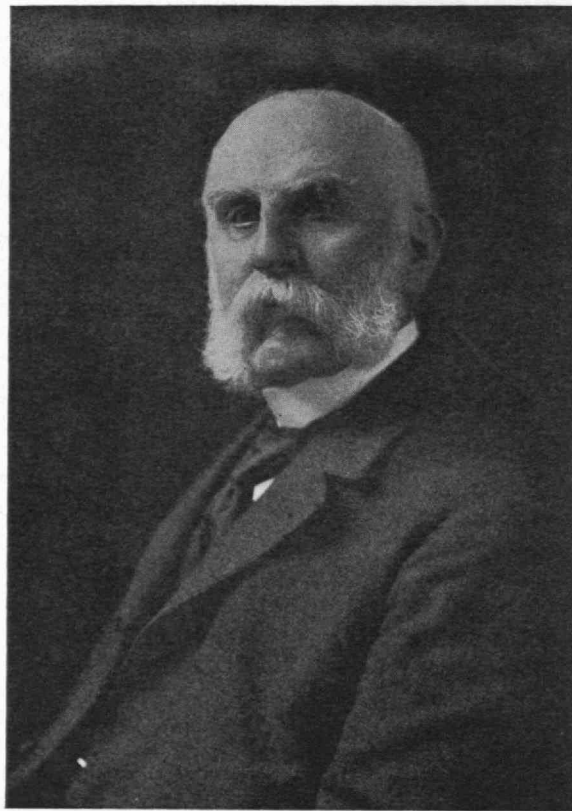
The new North Station will bring together into a unified passenger terminal the scattered facilities once used separately by the Boston and Lowell, the Eastern, and the Boston and Maine Railroads. Built in 1893, the present North Station was considered one of the best examples of terminal architecture of its day. It will continue to serve its purpose while the walls of the new structure rise about it. It is interesting to note that this new development is similar to a plan proposed over forty-one years ago in the undergraduate thesis of Frank L. Locke, '86.

### *George Abbott Osborne*

**S**URVIVING all his colleagues of the Institute's original Faculty, George Abbott Osborne, a member of the Department of Mathematics from 1866 to 1910, died of pneumonia at his home in Boston on November 19. He graduated from the Lawrence Scientific School in 1860, instructed for a year at that institution and then went to the United States Naval Academy to become professor of mathematics, navigation, and naval astronomy during the Civil War.

In 1866 William Barton Rogers, Founder and President of the Institute, was casting about for additions to the newly-formed staff and it was then that he came upon the young Annapolis professor and brought him back to Boston. His progress was rapid: from 1866 to 1868 he was Professor of Navigation and Nautical Astronomy; from 1868 to 1870, Professor of Astronomy and Navigation; from 1868 to 1871, Secretary of the Faculty; from 1870 to 1902, Professor of Mathematics, Astronomy and Navigation; from 1902 to 1910, Walker Professor of Mathematics; and in 1910 he was made Professor-Emeritus, though at his own request he continued to do a limited amount of actual teaching work.

Not only as a teacher but also as a textbook writer was



GEORGE ABBOTT OSBORNE

*Last surviving member of the Institute's original Faculty. He died November 19. See this page*

he widely known. He published "Examples of Differential Equations" in 1886, and in 1891 his "Differential and Integral Calculus," a book that was used and is still used in revision throughout the country. He was a member of the American Mathematical Society, the Technology Club of Boston, and a fellow of the American Association for the Advancement of Science.

### *The Aldred Roster*

**N**EVER, since November 9, 1923, when their founder, John E. Aldred, introduced Gerard Swope, '95, as the initial speaker, has the future of the Aldred Lectures seemed brighter than at present. Established to bring eminent, successful men to Technology in order that undergraduates, particularly seniors approaching graduation, might benefit, not only by the advice conveyed in an hour's talk, but equally by the mere fact of seeing such captains of industry and engineering in the flesh, these lectures have assuredly justified their establishment.

For this year six lecturers have been announced and, on January 6, one of these, William E. Nickerson, '76, of the Gillette Safety Razor Company, will fulfill a return engagement, for he was the third speaker of the original series, following Mr. Swope on December 11, 1923. Chronologically, Mr. Nickerson comes second, the opening lecturer, on December 16, being John F. Stevens, during 1927, President of the American Society of Civil Engineers.

The third, on January 20, is to be Charles M. Schwab, who spoke at the 1927 Annual Dinner of the Alumni Association and who has just retired from the Presidency of the American Society of Mechanical Engineers; the fourth, on February 17, is to be Robert Ridgway, chief engineer of the Board of Transportation of New York. Definite dates have not been selected for Newcomb Carlton, President of the Western Union Telegraph Company and the last speaker, Dr. Arthur D. Little, '85, who was, in 1921-22, President of the Alumni Association.

Mr. Stevens, whose lecture will have been delivered before this number of *The Review* gets into circulation, was the John Fritz Medalist of 1925. After some fifteen years of engineering experience on various western railroads, he entered the service of the Great Northern Railway in 1889. As its locating engineer in the Rockies and Cascades, his most noted achievement was the discovery of Marias Pass where the road crosses the Continental Divide at an altitude of less than a mile above sea level. Near the summit of the Pass now stands the bronze statue of Mr. Stevens shown on this page. In 1903 he became chief engineer of the Chicago, Rock Island and Pacific Railway, and a year later its second Vice-President.

He was appointed chief engineer of the Panama Canal and chairman of the Isthmian Canal Commission in June, 1905. In this capacity, Mr. Stevens opposed a sea-level canal and influenced the adoption of the lock-type, which has proved so successful. His greatest contribution to the work was procuring the plant and creating the organization for the dry excavation and solving the transportation problems involved in the removal of the earth. He resigned in April, 1907, and was elected Vice-President of the New York, New Haven and Hartford Railroad in charge of operation, a position he held two years, then becoming President of the Spokane, Portland and Seattle Railway and the Oregon Trunk Railway, during the period the latter road was being built.

A month after the entry of the United States into the World War, Mr. Stevens was sent to Siberia, in response to a request made by the Kerensky government, as chairman of a commission of railway engineers. This commission made recommendations to increase the effectiveness of the 5,500 miles of road stretching from Kola Bay to Vladivostok and Mr. Stevens was President of the Inter-Allied Technical Board supervising the Siberian Railways until his return to the United States in 1923. Subsequently he has engaged in consulting practice in New York.



*Times Wide World*

#### ON MARIAS PASS

*John F. Stevens, recent Aldred lecturer, receives a bouquet of flowers upon the unveiling of a bronze statue of him near the summit of the pass he discovered*

### *Oratory in Repletion*

**E**XCEEDED only by the catholicity of the speakers' respective fields was the reckless abandon with which the Executive Committee of the Faculty Club hurled speaker after speaker at a patient electorate to round out its lengthening November lunch hours. Certain facetious references to the "innovation" in the form of "A Faculty Club Picnic" announced for Columbus Day and subsequently abandoned "in view of further development of infantile pa-

ralysis at Haverhill," according to the official announcement, may have strengthened the Committee in a determination that this year, the seventh of the Club's activity, must not fall beneath previous high standards.

Be that as it may, on five of the nineteen working days between November 4 and 25 there came speakers: an editor, an actor-Dean, a scientist, an economist, and Porter Adams.

The editor who was spotted as Talker Number One on the bill was Robert Lincoln O'Brien of the *Boston Herald* and the date was that of Field Day, November 4. His topic was of a political nature and he did not feel Mr. Coolidge would be a candidate in 1928. If the man who Mr. O'Brien predicted would run successfully does run successfully, his name will be disclosed in *The Review* for December, 1928. The actor-Dean was Edgar M.



Wolley, until recently Director of the Dramatic Association of Yale University and now Dean of the Workshop of the Repertory Theatre of Boston.

Third on the list, the scientist, was James K. Clapp, '23, of the Communications Division of the Institute's Department of Electrical Engineering, who reported on the trip of "Portable I XM in Flooded Vermont", the log of which expedition appeared under the above title in *The Review* last month. Another alumnus, Norman Lombard, '05, Director of the Stable Money Association, followed six days after Mr. Clapp, propounding the thesis that mankind's sufferings would be largely alleviated if the dollar could be pinned down accurately to a particular purchasing power. The measuring stick of purchasing power could be, for example, an index computed by combining the index values of several hundred common staple commodities. If this were done periods of inflation and deflation would tend to disappear and financial panics would become obsolete.

Finally came a speaker whose versatility prevents his assignment to a particular calling, Porter H. Adams, '14, President of the National Aeronautic Association, whom the presiding officer cautiously introduced as "a distinguished member of a distinguished class" and for which designation Mr. Adams proceeded to qualify.

The November program of the Club included, in addition to the luncheon affairs, an evening meeting on November 19 at which the President of the Club, Dr. Harry W. Tyler, '84, presented President Stratton; Seth K. Humphrey, '98, whose recent volume "Loafing Through the Pacific" was noted last November in *The Review*; Professor Hale Sutherland, '10; and Professor Edward L. Bowles, '22.

### Annual Dinner

**W**HEN members of the Alumni Association sit down to the Association's Annual Dinner at the Boston Chamber of Commerce on January 7, three orators will face them from the speakers' table. Around the chair of Chairman Samuel C. Prescott, '94, President of the Association, will be grouped the Honorable Dwight F. Davis, Secretary of War; Dr. Frank B. Jewett, '03, President of the Bell Telephone Laboratories, Inc., and a Vice-President of the American Telephone and Telegraph Company; and Dr. Samuel W. Stratton, President of the Institute.

Secretary Davis, a graduate of Harvard and Washington University, was active in the civic affairs of St. Louis until the war directed his attention to the national scene. Throughout the Harding-Coolidge regime, he has been in the War Department, first as Assistant Secretary and later as Secretary upon the death of John W. Weeks in 1925. Dr. Jewett, as executive



GEORGE M. TOMPSON, '73  
*The new Secretary of 1873, as seen by  
Henry B. Kane, '24*

### Twenty-Five Years Ago in *The Review*

Issue: January, 1903

**A**T the 259th Meeting of the Corporation on December 10, 1902, the annual reports of the President and Treasurer were presented. "The main features of the Treasurer's report were as follows: The increase of receipts from tuition fees is stated to be \$31,000, accompanied, however, by a nearly equal increase of expenditure. The result is a deficit for the year of nearly \$6,000, which is less, however, than the corresponding deficit of the previous year. Mention is made of the purchase of a strip of land on Stanhope Street, and the erection of the Augustus Lowell Laboratory of Electrical Engineering. . . ."

Appointments confirmed included: Percival Lowell, non-resident Professor of Astronomy; Elihu Thomson, non-resident Professor of Applied Electricity.

"The Executive Committee was authorized to present a petition to the General Court asking for a repeal of those sections of the Act of 1861 which restrict the use of the land on Boylston, Clarendon and Newbury Streets. Mr. Frederick P. Fish, President of the American Bell Telephone Company, was elected a member of the Executive Committee to fill the vacancy caused by the resignation of Mr. Wheeler."

Faculty items included: "President Pritchett represented the Institute at the inauguration of President Woodrow Wilson at Princeton"; Professor Harry W. Tyler, '84, "was elected Vice-President of the College Entrance Examination Board"; after a careful consideration of propositions in regard to the organization of a student society based on scholarship, the Faculty has decided to take no present action in the matter.

The annual meeting of the Alumni Association was held December 26, 1902, at the Hotel Brunswick with President A. Lawrence Rotch, '84, in the chair. The following officers were elected: President, Frederick H. Newell, '85; Vice-President, Walter B. Snow, '82; Secretary, Arthur G. Robbins, '86.

"In accordance with a recommendation of the Association of Class Secretaries, the Executive Committee was authorized to appoint a committee of three to consider the possibility of coöperation between the Alumni Association and *The Technology Review*."

The annual dinner took place after the meeting. "About 150 were present, and . . . Mr. Rotch introduced Alexander C. Humphreys, President of the Stevens Institute of Technology."

head of the telephone company's research activities, has seen many revolutionary developments in communication come into being, for example, the photo-by-wire and television processes. He was a candidate for Term Member of the Corporation in 1925-26.

Plans for incidental entertainment and the list of informal speakers are still tentative, but definite arrangements have been made for the première of "Tech in Motion," an official Technology motion picture that has been in preparation for the last year and a half under the direction of Bursar Horace S. Ford.

### Tsetse Fly Versus Optimism

**T**HE 130th Meeting of the Alumni Council, held in Walker Memorial, November 28, was a continuation of the 99th Meeting, likewise celebrated in Walker, September 24, 1923. The latter was under the direction of George L. Gilmore, '90, sometimes called Light Horse Gilmore in recognition of the rapidity with which he, in a gay gallopade, conducted meetings. His successor in charge of the



## Ten Years Ago In The Review

Issue: January, 1918

THE 1918 Annual Dinner of the Alumni Association, the first ever held in Walker Memorial, received major space position in this issue. There were two speakers, President Richard C. Maclaurin and the Chinese Ambassador, Dr. Wellington Koo, "who looks like a boy and makes a speech like the American college man he is." Francis R. Hart, '89, as President of the Association, presided and in his report of the year summarized the war activities of the Institute and the Alumni.

President Maclaurin said in part: "The one subject for serious thought and for serious action today is the war. . . . It is strange that the two most critical steps in the Institute's history should have been taken on the eve of a great war. Only a little more than a year ago we occupied these new buildings, and by occupying them greatly increased our opportunities for usefulness. . . . We could not have improved our equipment more opportunely than we did.

"The other critical step was the actual foundation of the Institute, the first step that cost so much. The charter of Technology was signed by Governor Andrew only a few days before the outbreak of the Civil War. . . .

"As to the Institute itself, the great issue is whether we shall enlarge or contract, whether we shall become more provincial or more national, whether we shall strive to serve a particular section or the whole nation and to some extent the whole world. . . . We cannot render world-wide service either in education or in war merely on the basis of good will and intention. We must devise the means to the desired end. . . .

"Before settling the matter, however, we should observe carefully the broad current of education and not forget that there are many forces tending to divert the stream of influence from Boston and New England. This section has lost its supremacy in the realm of commerce and it may lose it in the realm of education, too. . . . Its greatest asset is its record of achievement and its tradition of high purpose and exalted aim. Let us continue to aim high. If we do so and are properly supported, we can build up in this community one of the greatest, if not the greatest, centers to be found anywhere in the world of science, pure and applied, for the two must go together, — a center of scientific influence that will profoundly affect the future of this country and, indeed, of the world."

130th Meeting, Samuel C. Prescott, '94, with commendable discrimination has seemingly set out to win for himself a similar title, a fact that explains, perhaps, the close connection between the meeting of four years ago and this last one. For the sake of historical accuracy it should not go unrecorded that there was one great point of divergence between the two meetings: not a hint of circumscribing circles was in Professor Prescott's program, but there was in place of these, Optimism with a capital O.

Optimism, in fact, was the *leitmotif* of the evening's entertainment; practically every one of the speakers iterated and reiterated a philosophy of buoyant expectancy. Certainly that is the only explanation of the candor of Frederic H. Fay, '93, when, presiding at the meeting of the Association of Class Secretaries (See page 167), he confessed that \$1,500 lay mouldering in the treasure chest of that organization. The fact that the Council did not immediately pounce upon Mr. Fay and demand the \$1,500 for dormitories revealed that it was an uncontagious sort of Optimism. The infectious Dean Burton; the lambent James P. Munroe, '82; the persua-

sive Allan W. Rowe, '01; the vigorous Harry J. Carlson, '92, armed to the hilt with their subtlest blandishments could prompt nought but the silent assent of the comfortable Council. Certain exceptions must be made to this generalization. Percy R. Ziegler, '00, interrogated the Council about the possible future attitude of the official Institute toward fraternities, and the effects that increased dormitory facilities would have on the property-owning chapters. He was answered by President Stratton who explained that a Committee of Twelve had been appointed by the Corporation to make a study of just this situation. A. Farwell Bemis, '93, referred to the inexpensiveness of Institute dormitories compared to those of other colleges, and then in a second appearance he discussed different methods of financing the building of the dormitories. Henry F. Bryant, '87, as an addendum to what had been said by Dean Burton, discussed at some length how classes had and had not supported the Dormitory Campaign. He urged the secretaries to more vigorous solicitation.

Such is the gist of the evening's discussion, and so may be listed the men who, as Mr. Munroe would put it, had not been bitten by the tsetse fly. The remaining part of the evening was consumed by the formal program. Bursar Horace S. Ford furnished the evening's first turn by his dissertation on inner worth and outer form, a subject upon which he has elaborated upon on page 162 of this issue.

Following him came Dean Burton. Like De Pachmann he is making many farewell appearances, each of which the public seems to like better than the one previously. He spoke, as of course he would, on his experiences as director of the Alumni Dormitory Fund Campaign. Some of his remarks were of an incisive frankness but he concluded with a peroration on Optimism.

It was Mr. Munroe, however, who received, and fittingly, the ovation of the evening, as undoubtedly he did at Mr. Gilmore's 99th Meeting. Let it be said by way of introduction, though it is hardly necessary, that Mr. Munroe is *l'enfant terrible* of Institute orators in his own dignified way, when he airs some of his pet aversions, not the least of which is the present interior use

and construction of Walker Memorial Building. He even becomes Rabelaisian if gentler, tenderer methods seem inadequate; in this instance he summed up the Walker situation by referring to the building as a monumental structure which included an eating house and, in its attic, a gymnasium. Such indignities he would obliterate by decimating the eating house and gymnasium, adding another story, and making the building the commodious social and activity center that originally it was planned to be.

The Walker Memorial problem was not the only one that Mr. Munroe impaled on phrases well barbed. There was the absence at the Institute of any assembly



FREDERIC H. FAY, '93  
Chairman of the Meeting of the  
Association of Class Secretaries.

place for the student body. In the Fieldian phrase, "there is a crying need" for an auditorium. Then there is the Institute campus, a dusty Sahara, shaded by four trees (he had counted them all).

Two more speakers remained. Dr. Rowe extended the remarks he made at the 99th Meeting on the reapportionment of space in Walker Memorial, carefully substituting for circumscribing circles Optimism with a capital O. Mr. Carlson, the architect, also rode through on the tidal wave of Optimism in adding a ditto *fortissimo* to the remarks of Mr. Munroe and Dr. Rowe. He assured the Council that despite the chimneys on top of the new dormitories, the architectural problems of the Institute were being studied and restudied with the greatest of care and optimism.

These items all fused into a pleasant whole. No one left with the feeling of having wasted an evening. But not many left with the feeling that they contributed anything. Halcyon days though these may be, they lack the tonic effects of the windy eras when there were Hunter Reports, Merger Fights, Presentations of Watches, Swope Finance Plans, or discussions started by the 'cello-like voice of Bradley Dewey on entrance requirements. Eloquent optimism is not of sufficient potency as an antidote to the bite of the tsetse fly. The efficacy, however, of optimism well heralded and presented was illustrated by the exceptional attendance. As the presiding officer remarked, everybody was there (eighty-six by count) from the President down to Orville B. Denison, '11.

### *Back to Bulfinch*

CHARLES Bulfinch, twelve years after the close of the Revolution, designed a shrine for the Sacred Cod, the Massachusetts State House whose dome of gold crowns Boston's Beacon Hill. But if that same architect, who later designed the central structure and the dome of the Capitol at Washington, were to return to his Boston masterpiece, he would, with difficulty, suppress a shudder. In the intervening years, two massive wings of marble were added to either side of the original structure, and to match them, the red brick Bulfinch front with its contrasting details in white marble and wood was obscured by paint, once white, but now scraggly and discolored.

The Art Commission for the Commonwealth recommended to the Governor last month that the paint be removed from the Bulfinch front and that it not be replaced until the effect of the change has been studied. Putnam and Cox (William E. Putnam, '98, and Allen H. Cox, '98,) rejoiced, for they were the architects of the two buildings which flank the State House lawn; the American Unitarian Association Building and the new Hotel Bellevue. Of the former, they wrote to the Boston *Evening Transcript*, "We were uncomfortably conscious of the ghost-like expanse of near-white against which our building would stand out. It was partly because we were confident that some day the Bulfinch masterpiece would be allowed to again assume its early chastity that we chose to design our buildings in the same spirit. . . .

"We have always felt that a serious mistake was made when the wings were carried out in marble and the center

painted white to match the wings. When freshly painted, a certain harmony results, but the detail which was so carefully worked out by Bulfinch to show on the darker background of red brick is largely lost, even from a near point. . . . After the paint has been on for some time, its change in color is so great that the center part no longer matches the wings and the effect is a dismal failure. . . . We go so far as to predict that even if the wings are left as they are, the effect of bringing out the old Bulfinch front into relief against the white background will convince every one that a tremendous improvement has been made."

### *A.S.M.E. Meeting*

MORE than 2,000 engineers, industrialists, educators, economists and men of science attended the Forty-Eighth Annual Meeting of the American Society of Mechanical Engineers, in New York, December 5-8, at which the second woman member in its history joined the Society. Charles M. Schwab, retiring President, presided at the general meetings and spoke at the annual dinner on the subject of "Human Engineering."

Lt. Edwin E. Aldrin, '17, of the United States Air Service, was chairman of the Aëronautic Division, the meeting of which was transferred to Washington; and Elisha N. Fales, '11, of Dayton, Ohio, delivered a report on "The New Propeller-Type High-Speed Windmill for Electric Generation."

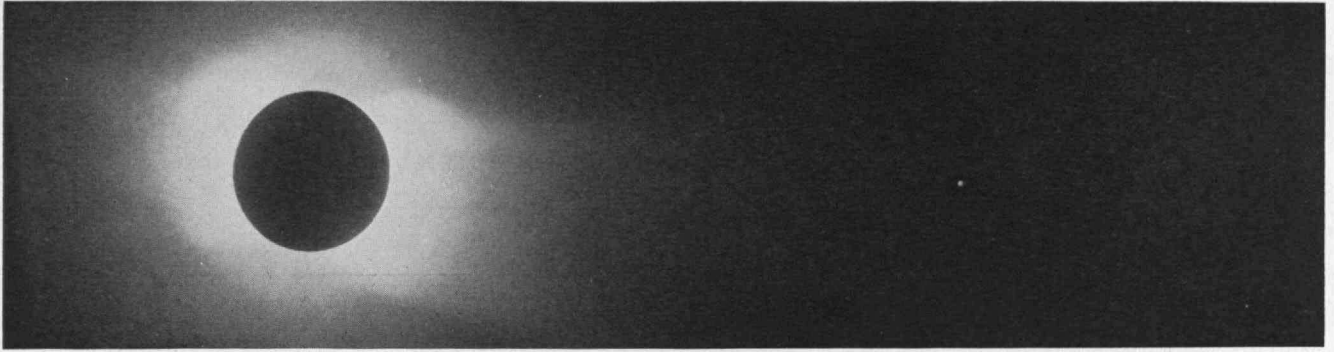
Other speakers before the professional divisions at one of which Professor Dugald C. Jackson, Head of the Institute's Department of Electrical Engineering, presided, outlined national progress in industrial power, industrial psychology, management, training for the industries, hydraulic power, railroads, oil and gas power, fuels, materials, handling, engineering education, photography in its application to engineering, heat transmission, boiler feed water research, and safety.

### *Technology Etchers: Frank A. Bourne, '95*

A PRACTISING architect by profession, and a busy one, Frank A. Bourne has entered the field of the graphic arts prompted by the desire for a diversion and a hobby. During trips to Europe over a long period of years, he recorded impressions in the mediums of pencil sketches, linoleum and wood cuts, water colors, and lithographs, but not until some five years ago, upon the acquisition from a friend of an etching press, did he add to his mediums that of copper-plate etching. Under the tutelage of John T. Plowman, Cambridge etcher, he set about acquiring the technique of that art and in odd moments he has worked at it since then.

"Galérie Cluny," the etching on the cover of this issue, was etched in the courtyard of the Cluny Museum, Paris, by Mr. Bourne in May, 1927, directly on the grounded copper plate. The plate was bitten and completed in the studio of M. Dallemagne, the etcher, and with his assistance, and the prints were made in Paris. The cover reproduction was made from print number twenty-one which was lent by Charles E. Goodspeed and Company.





## Investigating the Sun

*Is weather affected by solar radiation, and is the latter affected by sun-spots? An account of the work being done to answer these questions and of the 30,000 mile trip made by the author in search of an observatory site*

ALL of us, of course, are aware that the life of people on the earth and the energy that

keeps things moving depends upon the sun. Consequently, it is really a very worth-while thing to study. Uncle Joe Cannon once remarked at a hearing at the Capitol, when an appropriation for such study was under consideration: "I don't care a damn about the stars that are so far away that it takes light a thousand years to come from them. If they are all abolished tonight our grandchildren won't know the difference. But everything hangs on the sun, Sherley, and it ought to be investigated, and I think this appropriation is all right."

Now there are a number of different ways of studying the sun. In the first place, when there is a total eclipse and you can see the objects which surround it, then you can see the beautiful corona. The total eclipse of May, 1900, which we observed at Wadesboro, N. C., is shown in the photograph above. The original plate also showed the little planet Mercury. It is not often that people in the city can see this planet since it lies so near the sun.

The sun is occasionally troubled with spots, and these spots are apt to go in pairs, like those in the illustration below.

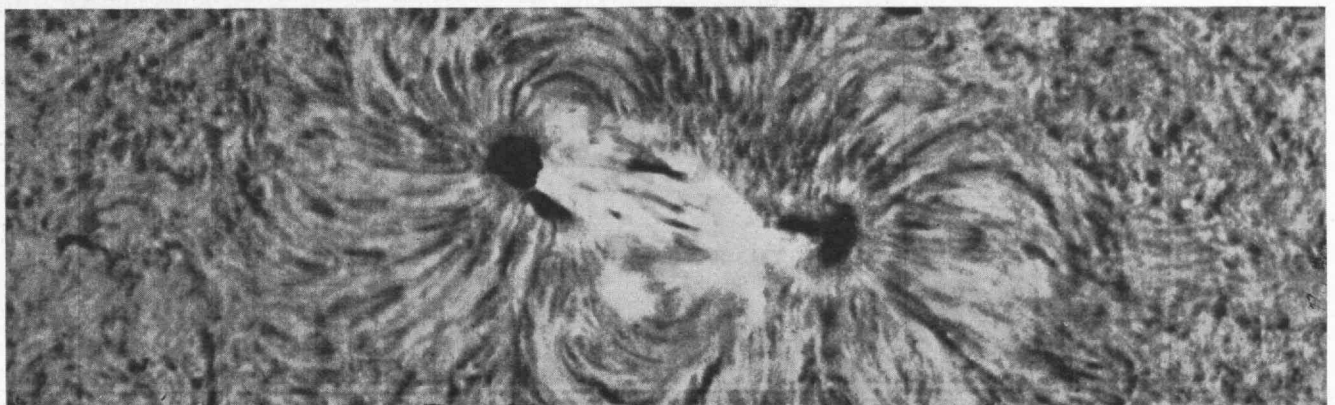
By CHARLES G. ABBOT, '94  
*Acting Director of the Smithsonian Institution*

Professor George E. Hale, '90, has shown that they are of magnetic character, and that if one of the

spots is a north pole, the other is a south pole. Curiously enough, if, in the northern hemisphere, the advancing spot is north, the following one is south; but if you are looking upon the southern hemisphere, you find just the opposite — the advancing spot south, the following one north.

These spots wax and wane in numbers during the course of an eleven-year cycle. If, in the northern hemisphere the advancing spots are north poles in one eleven-year cycle, then in the next following cycle the advancing spots are south poles. This is a very curious and interesting thing. I do not know whether anybody knows the cause of this waxing and waning of the spottedness of the sun, or why it should take place in an average period of eleven years, much less why it requires twenty-two years for the full magnetic cycle.

There is a great deal doing on the sun at the time of maximum sun spots, as might be expected. It is as if one stirred the coals and brought fresh ones to the surface. Consequently, the sun sends out more radiation at times of maximum spottedness.



BIPOLAR SUN-SPOTS

*George E. Hale, '90, states that the first edition of the great Chinese Encyclopedia, published in one hundred volumes in 1322, contains observations of forty-five sun-spots made between A.D. 301 and 1205. As Dr. Abbot points out, Dr. Hale first discovered their magnetic nature*





#### SOLAR COOKER

*At the Abbot cottage on Mt. Wilson this apparatus was constructed for cooking with solar heat. It is described below*

The sun is the source of the heat which warms the earth and is indirectly the source of all the power which is used, either coal or oil or water power. Many attempts have been made to utilize solar radiation directly, instead of waiting for the geological eras to roll their almost immeasurably slow progress, allowing time for a plant to grow and decompose and form coal or oil. Some people have endeavored to catch the solar beam, focus it and thereby run engines. On this page is pictured an example of how I myself made an attempt to utilize the solar radiation for heating purposes and to lay a basis perhaps for further studies on the applications of it to power purposes. In order to make the experiment interesting and attractive, we arranged a solar cooker on Mt. Wilson in California as shown in the illustration. The mirror at the front, a concave cylindrical mirror, receives rays over an area seven feet wide and twelve feet long, and brings them to a focus on the tube in the middle which lies parallel to the earth's axis, and which is blackened and filled with engine cylinder oil. By a simple automatic contrivance we rotate the mirror during the day so that it follows the sun. The oil becomes very hot and tends to rise up into the reservoir which is above and is well protected from heat loss. Another tube leads down from the reservoir and comes in at the bottom of the mirror, so that you have a continual gravity circulation of oil which makes the reservoir very hot. Bread may be baked in the oven within the reservoir.

Solar radiation is a subject well worth studying, and more particularly so as the intensity of the sun's rays is not constant but variable from time to time. The matter of observing the intensity of solar radiation would be very easy if we were on the moon, because

it has no atmosphere to interpose, and one could see by measuring the total intensity of the rays from day to day how much the sun was varying. But beneath this ocean of atmosphere under which we are living, these observations are very difficult. The sun's rays vary greatly from hour to hour and from day to day, according to the height of the sun above the horizon, the quantity of atmospheric water vapor and clouds and the dust in the air. When observing on the surface of the earth, one has to spread out the rays in a long spectrum and examine each, color by color, ray by ray, because they are unequally altered by the atmosphere.

Although we had made measurements at different places—Washington, Mt. Wilson, Mt. Whitney, Calama in Chile and elsewhere—in a manner

adapted to eliminate atmospheric influences, and with closely agreeing results, there were those who were of the opinion that our measurements were not unaffected by changes in the transparency of the air, notwithstanding all the care that we might take. In order to give a check upon the matter I devised, in the years of 1913-14, a set of automatic recording instruments for observing the total radiation of the sun. These can be attached to balloons made out of dental rubber. The balloons go up expanding and expanding as the gas inside presses out and the pressure of the air gets less and less, so that a balloon which was about a yard in diameter at the surface of the earth becomes perhaps ten or fifteen yards in diameter as it gets up high enough, and the rubber finally gets so thin that it has to burst. By sending these balloons up in pairs with the instrument attached, one balloon always bursts before the other and the remaining one comes softly down. We sent up a number of these from Omaha, Neb., in 1914, and one balloon made an excellent record up to fifteen miles elevation, where the pressure of the air is only about one twenty-fifth of the pressure at sea level. One of these instruments was recovered about 150 miles east of Omaha in perfect shape and we got results which agreed almost exactly with our computations from observations made at the earth's surface.

It is not much use to attempt the study of solar radiation and its variability in a cloudy place like Washington, so, in 1905, when the Mt. Wilson Observatory was established, Dr. Hale invited me to go out there and begin measurements of the radiation of the sun. Our observations at Mt. Wilson, having gone on a number of years, and having indicated a variability of the sun, we feared that the apparent solar fluctuations

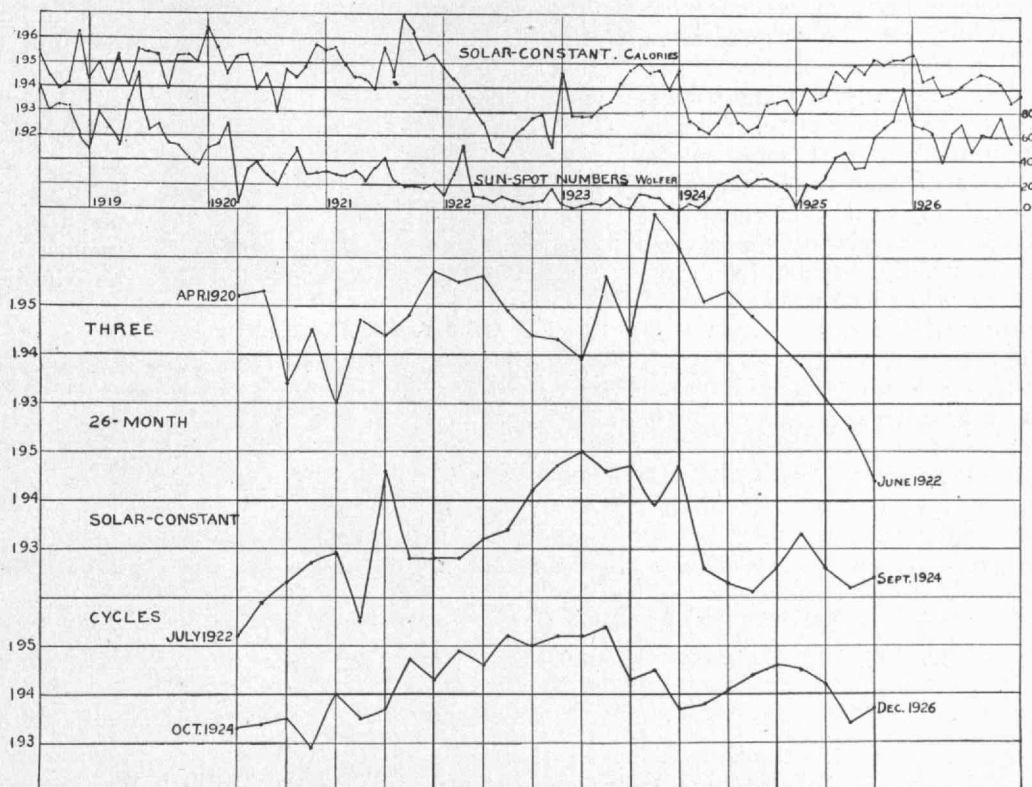
might be caused by faulty allowance for the variation of the transparency of the atmosphere. In order to observe at higher altitudes and see if we would get the same result, I carried my apparatus, in 1909 and 1910, up to the top of Mt. Whitney, the highest peak in the United States. My outfit included a long spectroscope and a very delicate instrument called a bolometer, capable of measuring differences in temperature to a millionth of a degree. With it I made determinations of solar radiation outside our atmosphere from Mt. Whitney which agreed very closely with those we were getting on Mt. Wilson.

More recently, after the work of H. H. Clayton had indicated that the variation of the sun is of real importance in the study of the weather, we were led to establish an observatory in Chile on Mt. Montezuma, about 9,000 feet high, in the foothills of the Andes. Not a bird or an insect or a creeping thing is there, nor grass or cactus or any form of life whatever, except the house-flies which are everywhere. Every morning the observers go up through a winding trail to the top, where we have a horizontal tunnel about thirty-five feet deep in the side of the mountain, in which is kept the delicate apparatus, the spectroscope and the bolometer. We use a tunnel for the reason that while you are measuring to a millionth of a degree the surrounding conditions have to be looked after. No simple way is so effective as to go right under the ground where the temperature is nearly constant every day in the year, despite outer changes.

The variation of the sun interests us greatly, and we are trying to see if it is possible to improve the system of weather forecasting. The system of weather forecasting which is universally applied at present depends upon the telegraph. You learn from the telegraphic reports that stations to the west of you, the northwest and so on, have such and such barometric pressures, temperatures and rainfall, and you trace the march of the waves of barometric pressure, temperature and rainfall across the country so that you can predict for twenty-four or thirty-six hours in advance when the change will occur at your station. But if the sun is variable, there should be a relation between the variations of the sun and the

temperature and other meteorological elements, and therein may lie the causes of the waves just mentioned. We have been measuring this variation for years in order to see if it could be used as a forecasting element.

The curve on this page shows at the top, beginning in 1918, the monthly march of solar radiation. In 1922 there was a sudden great fall and the values have run low ever since. The heavy horizontal line in each of the curves shows the average value for many years. You see that from 1922 to 1924 the curve never reached the normal and, in fact, it is hardly up to normal yet. It occurred to me that this circumstance may have produced some unusual weather, and I suggested in a paper I gave before the National Academy several years ago that this low condition of solar radiation might be associated with unusual weather conditions. The weather people say, however, that all weather is unusual, but possibly it has been more unusual than usual lately. If we had these observations going back to the time of Tutenkhamon or Solomon, or even Sir Isaac Newton, it might be that we would know what to expect when the sun changes. But at the present time we have them going back only eight years, which is not a long enough historical basis on which to produce forecasts for a season or a year in advance. Quite recently a hopeful aspect has appeared through the discovery of a strongly marked regular periodicity of twenty-five and two-thirds months in the solar variation. It has plainly persisted over



#### HEAT FROM THE SUN

Variation in solar radiation, according to Dr. Abbot who, in 1915, stated the value of the solar constant as 1.93 calories per square centimeter per minute. "Expressed in another way the measures indicate that if the sun's rays could be completely exposed to melt ice exposed continuously to them at right angles, they would suffice to melt a layer 426 feet thick in a year." Dr. Abbot believes there may be a connection between this variable constant and the weather



six years, and may be permanent. We have had until recently two stations, one of them in the southwestern United States on a mountain in our desert region, and the other one in Chile on a desert mountain. At both of those stations we have been observing for several years.

The National Geographic Society is interested in this problem of the world weather and its dependency on the variation of the sun, so about two years ago they gave me a grant of money to pick out the best place in the eastern hemisphere to locate a solar observatory to coöperate with those which we have been operating in North and South America.

In search of its site, I went first to Algeria, which seemed to promise high level desert areas on the edge of the desert of Sahara. From Algiers I went to Ain Sefra in the Sahara Desert, but I was not satisfied with the weather conditions there so I moved on to Egypt. Egypt, unfortunately, is pretty flat, except for parts which are inaccessible. It was suggested that I might be satisfied with Mount Sinai where Moses received the law. But as we went down to the Red Sea and I looked at those chocolate-colored mountains, perfectly barren and extending back miles and miles, with Mount Sinai forty miles away, and a steamer stopping at its port only infrequently, I thought it was not a very inviting place. It did not seem unlikely that some of the citizens of that region might be moved to steal everything and assassinate everybody. So we went on through Bombay and Jaipur, the place where the long-tailed monkeys gallop on the roofs and look over in a wise way to see what is going on in the street.

At last we reached Baluchistan, which is a part of the world where Cook's tourists very seldom go, and we looked at a place on top of the Khojak Pass, 7,500 feet high, within a stone's throw of the place where Lord Roberts dragged his guns in the Afghan War. I was not alto-

gether satisfied with the prospect in that country. In some respects the conditions were very good but, unfortunately, somewhat primitive with respect to law and order.

One curious instance of the justice of that country came to my attention. The English have an officer called the Political Agent who has great powers. One day he was going through a town and saw a woman with her head tied up.

"What is the matter with your face?" he asked.

"My husband cut my nose off."

He sent for the husband and demanded to know why he had cut off his wife's nose. The answer was because he thought she was with so-and-so, mentioning the name of some man with whom she ought not to have been.

"Well, was she?"

"I am not sure," replied the husband, "the man claims he was thirty miles away."

"I can't let you cut your wife's nose off for nothing," said the English official. "I shall put you in jail for a year." And Mahmoud went to jail.

The elders of the village came and remonstrated with the official, "Why, she is his property, he bought her for a great price, and if he likes to cut her nose off, it is his own loss. A year is too much; a few weeks would be sufficient."

The Political Agent said he would take it under advisement. The next day he sent for the elders and told them he would let Mahmoud out of jail if he would put his wife's nose on exactly as it was

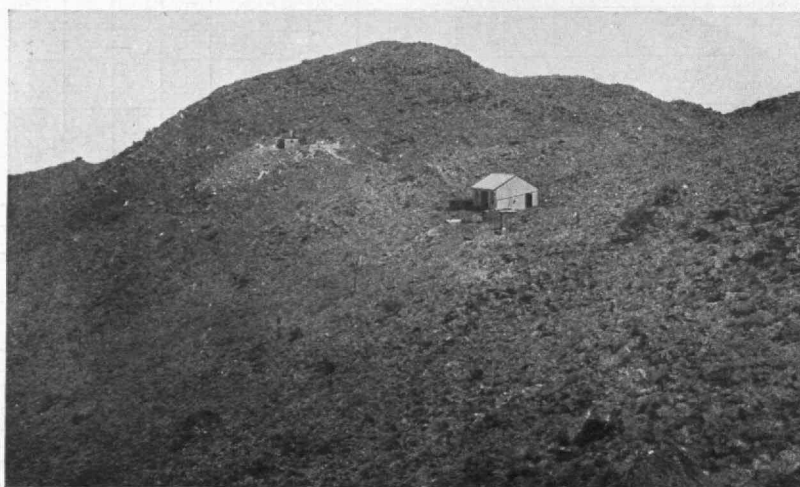
before, or if he would cut his own nose off exactly like his wife's. Mahmoud did not attempt to satisfy either of the conditions and remained in jail.

Being not altogether satisfied with Baluchistan, I decided to go back to Africa and investigate the southern portion of the continent. Proceeding down the east coast I disembarked at Durban in Natal, where Cecil Rhodes landed fifty odd

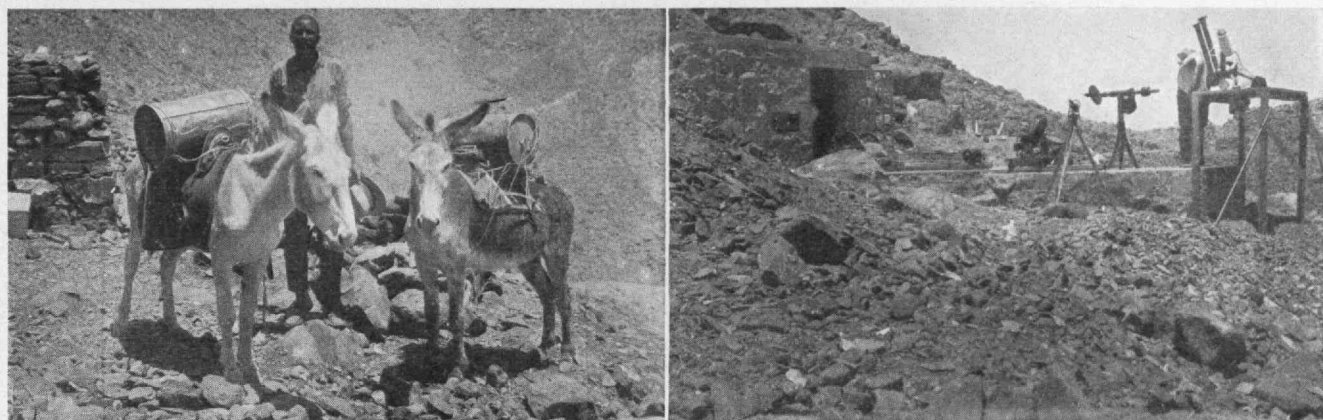


ON MT. BRUKKAROS

*Dr. Abbot covered 30,000 miles seeking an appropriate site for a solar observatory and he finally chose this site in Southwest Africa. Above: Waterfall and water-hole on the mountain. Below: Observatory and observers' bouse*







## IN HOTTENTOT COUNTRY

*Above to the left: A Hottentot water-carrier employed by the observatory. Above to the right: Director W. H. Hoover reading instruments. Below: Apparatus for observing solar radiation*

years before, and proceeded to Johannesburg and Pretoria and on into what was formerly German West Africa.

We located our observatory there on top of a mountain which was rough enough. It is situated on a plain at an altitude of about 3,000 feet and Mount Brukkaros sticks out above the plain about 2,000 feet more, so that it is almost exactly a mile above sea level at our station. The tunnel for the instruments is located right at the top. The observers with their sixty cases of instruments, and even with little Betty Jean Hoover, sixteen months old, along with the party, and her aunt to look after her, are all located in a little house near the observatory. The nearest town is called Berseba, about seven miles away, a Hottentot town with only two white people there, one a storekeeper, the other a German missionary. The nearest town where they get their supplies is Keetmanshoop, sixty miles away; so they

are not troubled with gossiping neighbors. The Hottentots live in houses that are something like Eskimo igloos, only made of straw. Sometimes they make them of bits of sheet iron, such as old gasoline cans, and there is never any particular place for the smoke to get out. We had to get an affirmative vote from the Hottentots before we could occupy Mount Brukkaros.

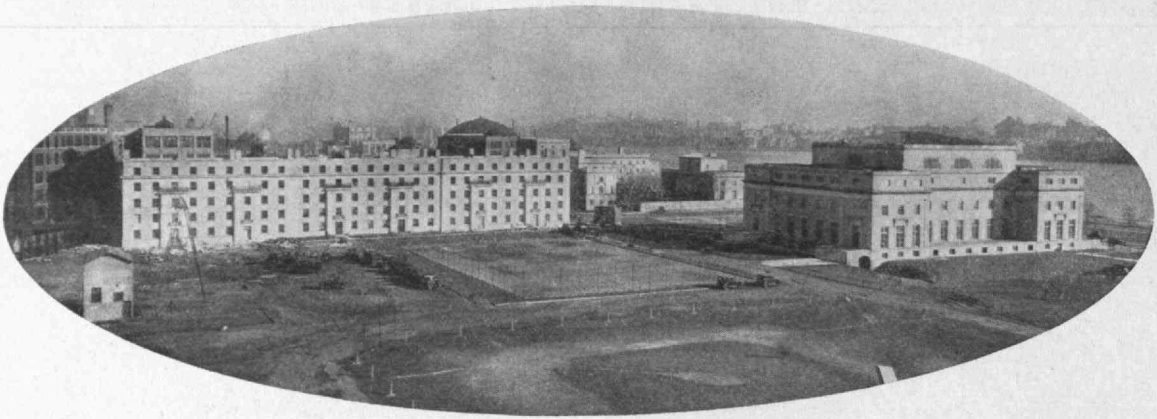
Thus we direct from the Smithsonian Institution at Washington three unique solar observatories in remote corners of the world. Our job is to measure the intensity of the rays of the sun which support

all life and power on earth. We follow attentively the variations of its supply of energy, hoping that thereby the next generation may be in position to answer the question which for lack of records we cannot. Possibly as a result of these studies, our successors may be in shape to forecast the good and bad seasons, like the prophet Joseph of old in the land of Egypt.



## OUT POST

*Close-up of observers' house on Mount Brukkaros*



# Salient Features of the New Dormitories

*The Bursar of the Institute gives an inside view of Technology's  
Student Quarters*

**A**N average alumnus, viewing for the first time the four new dormitory units now under construction and adjoining the Class of '93 unit, is not likely to receive any particular thrill so far as their outward aspect is concerned. The buildings are not monumental. They are not marked by any particularly appealing architectural details. There are no fine Gothic towers to catch the late afternoon sun, or arched passageways, cloistered quadrangles, or colonnades such as delight the eye at Yale, Princeton or Virginia. But while they are drab, they are also durable. If they appear boxlike, they are also businesslike; if plain, permanent. If the glories of Greece and Rome have not been called upon to any extent in the architecture, (not even in the chimneys) we are glad to say that the Middle Ages have not been referred to in the matter of plumbing — or any other essential feature.

The good points about our dormitories, and there are plenty of them, are within the walls and the whole idea back of their planning has been to care for the living conditions and the welfare of the men who are to occupy them. The average college dormitory consists of an assortment of bare rooms frequently equipped with a fireplace, but with a minimum of facilities, or none — all indiscriminately dovetailed into a monumental type of building. No fault is found with the latter, but no one apparently has given much consideration to the interior arrangements; that much is evident. Primarily on account of the interest of and time devoted by a member of our own Alumni Association, Technology's dormitories, from the beginning, and particularly these new ones, have received the closest attention to details which concern the living conditions of students. One need only to step inside and check up the many items — many not apparent at a glance — contributing to the real comfort of the occupant. Many colleges state that their rooms are completely furnished. One would gather from this information that a new student might step jauntily into the room upon arrival, drop his suitcase, and be immediately at home. But upon checking up several of these "completely furnished" dormitories, we would

BY HORACE S. FORD  
*Bursar of the Institute*

find that the student might have to forego light until he had purchased lamps, would certainly be obliged to sleep in his clothes until he could arrange for such more or less necessary articles, as blankets, sheets, and pillow cases, and might have considerable difficulty in even washing his hands — assuming that he could find a lavatory — as soap and towels and such items are generally ignored entirely. By way of contrast, it may be said fairly that the furniture, furnishings and facilities in the new Institute dormitories put them in the "Statler" class. The new student, upon arrival, finds everything that Mr. Statler offers in essentials, except the rug on the floor and the newspaper under the door (*The Tech* please take notice). He finds a comfortable couch bed equipped with an all-hair mattress, and as good a pillow as he has at home. Under the couch cover, which is intended to make the bed a lounge as well, he finds a full complement of sheets, a pillow case and blankets — real woolen ones, too. A double-pedestal desk, two good chairs, a chiffonier that is especially designed for a man's use, a bookcase, a desk lamp, a wastebasket, towels, both bath and plain, soap, a lavatory with shaving lamp above, are among the items that are rapidly inventoried. There is a closet in every room and it is so placed between the rooms — not in them — that a considerable amount of available space is not cut off. The room is generous in proportions, averaging eleven by seventeen feet, which is considerably larger than most other institutions provide.

No time need be wasted chasing second-hand furniture, bedding, lamps, towels, soap, and so on, or seeking information regarding a long list of rules, regulations and prohibitions set up by the Institute. The Student Governing Committee makes most of the regulations and this, we believe, is as it should be. To sum up, a mother may be certain that her darling in the freshman (or any other) class will have fresh sheets and pillow cases every week, fresh towels every day, and suitable facilities for hanging up and putting away his clothes in reasonable order; although it must be said that with all the facilities and encouragement in the world, no marked



result will be produced in certain cases. Students presumably have a right to a certain amount of disorder in their living conditions and they are not slow to exercise this.

Most students like to decorate their rooms and special attention has been given to permit this with the least difficulty. From the baseboard to the plate rail (with the latter is combined picture molding) burlap has been placed on the walls and painted, all in such a manner intended to make the walls practically fool-proof as far as damage from driving nails and hanging pictures is concerned. The plate rail offers a suitable place for the display of signs, ornaments, and other acquisitions and evidences of student life that formerly were difficult to display. The student will also find wall plugs on either side of his room offering the use of electric power up to the limit of fuse capacity in any way that he likes. At the Institute he will find no room meters, and he will find no restrictions on the use of electric flat irons, frying pans, radio connections or practically anything else electrical. If he misuses the privilege, however, out goes the fuse and that means that a dozen rooms are in darkness. One needs no great imagination to believe that student government — accused of many shortcomings — does not fail to function properly in such a case. Few college dormitories are as liberal in this respect as Technology and it should be stated here that the misuse of electricity is almost negligible.

Add to this that there is steam on during the whole Institute year, hot water and plenty of it night and day, adequate toilets and showers on each floor, and you will realize that the young man in our dormitories has some advantages over your "good old hall-bedroom days" on St. Botolph Street and St. James Avenue.



HORACE S. FORD

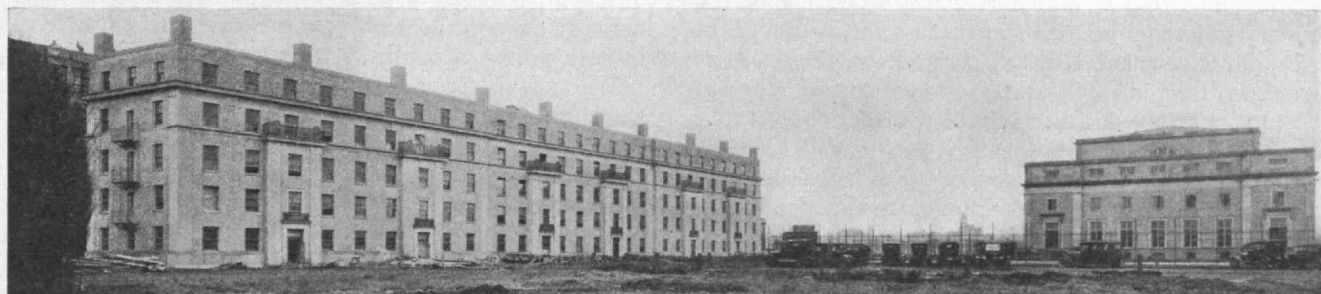
*Since 1913 Bursar of the Institute, he has taken a keen interest in the living conditions of undergraduates*

Experienced colored porters provide service. Many of these men have served with the Pullman Company. They are employed the full day and, we believe, supply a much superior service to the usual "goodies" whose hours are limited and who must, of necessity, eke out their small pay with laundry, sewing, mending, and the like.

Up to this point we haven't had a word to say about the cost of all this. If the facilities and arrangements about which we have been boosting our own stock merely resulted in rentals that made our dormitories a home for rich men's sons only, there would be little to crow about, but the fact is that the Institute is able to offer these rooms on modest rentals averaging \$5.50 per week. So if you have felt that we were presumptuous in claiming essential accommodations comparable to Mr. Statler's houses, you will

at least admit that we have not attempted to follow his scale of prices, and more important, \$5.50 per week is a far better buy than can be obtained in any outside rooming house either in Boston or the suburbs. In fact it is difficult in any part of Boston or Cambridge to rent a comfortable room without services such as the Institute offers at a price so low as that.

It is our belief that the Technology dormitories, as operated, are exactly the sort of place in which students should be housed and the whole idea of this statement has been to drive home, in the minds of Class Secretaries and others interested in the completion of the Alumni Dormitory Fund, the thought that the dormitories themselves, if not gorgeous to the eye outwardly, are well to the front in everything that makes for the comfort of the student occupants and in that respect are, we believe, something in advance of all other college dormitories in the United States.



GROWING COMMUNITY

*This view, with the one on the opposite page, shows the position of the new dormitories relative to Walker Memorial (on the right) and the old dormitories*



# Research As a Measure of the New Japan

*An observer records some first-hand impressions of industrial research in Japan, and, using them as a measuring stick, concludes that Japan will occupy an important place in the commercial struggle of the next decade*

POLITICALLY speaking, Japan is one of the oldest of nations. Her historical records — of more or less definitely established authenticity — carry back the story of her continuous existence to some 660 years before the beginning of the Christian era. By the reckoning of an economic historian, however, Japan is a young nation, a newcomer among the industry-motivated civilizations of the world. If she be judged by yet another measure — what I like to refer to as the industrial “time-lag” — Japan presents to an observer still a different economic aspect.

If one were to study the time interval, or “time-lag,” between the uncovering of a scientific principle and its ultimate industrial application, he would observe that a discovery in pure science research becomes the practical tool of industry only when that discovery has passed through the laboratories of industrial science and emerged ready for the processes of mass production. He would see in this “time-lag” a qualitative criterion by the help of which he could judge the ability of a nation to develop herself industrially.

The growth of commercial radio broadcasting since 1920 is common knowledge. We all look on this infant prodigy in the family of science-aided industries as one that has shown a phenomenally accelerated rate of development, a remarkably short “time-lag.” Yet it was fifty-five years ago that the germ, from which the radio industry grew, was created in the electro-magnetic wave formulae of James Clerk Maxwell, the English mathematical physicist. Hertz, using these formulae as raw material, carried the development through another stage by means of applied science research, but it was not until 1901, with the invention of wireless telegraphy by Marconi that this research assumed a tangible and concrete form. Then came further researches and radio broadcasting. Last year more than six million dollars worth of radio equipment was sold to the public.

At about the time that Maxwell was developing the formulae that were destined to be the foundation of the radio industry, the Japanese people were released from serfdom following Commodore Perry's opening of the country to foreign intercourse. It may thus be seen that in Japan, science and industry, as we know them, are at most but fifty years old, and that whatever industry has become in Japan is the result of a marvelously rapid rate of development.

From the time of her awakening until five years ago, Japan was utterly dependent upon an imported technology, and her industries were honeycombed with foreign advisors, foreign methods, and foreign research. Today, the situation is vastly different. Japan has almost completely thrown off the yoke of foreign influence. She now has her own research institutions and her own Japanese methods produced by her own

By MAURICE HOLLAND, '16

Director, Division of Engineering and Industrial Research, National Research Council

technicians. The 30,000 engineers upon the membership rolls of her national engineering societies are but a single evidence of the bulwark

with which Japan protects the integrity of her industrial development. She has ninety-three research laboratories, supported by the Imperial Government, prefectures, municipalities, and private companies, for the operation of which more than four million dollars are expended annually. In these outposts on the Japanese industrial frontier, the best that her foreign observers have culled from the experience of Western nations is combined with the products of her own research for adaptation to conditions in the Island Empire.

It must not be inferred, however, that the Japanese people are imitators rather than creators, because for every idea that she has adopted to meet economic requirements and local conditions, a hundred have been rejected as unsuitable. The diversity of her research organizations and the intensive application of her science to her industry, furnish proof of an economic advance that foreshadows consequences of tremendous commercial significance to the Western World.

## II

A year ago I attended the Third Pan Pacific Science Congress in Tokyo as the representative of the National Research Council, and while there I undertook a survey of the industrial situation. I was particularly interested in studying, at first hand, the status of organized research and its manifestations in Japanese industries, and I found that most of the basic industries are being served by one or more research agencies.

Most important, and best equipped of the research organizations in Japan is the National Institute of Physical and Chemical Research. Founded ten years ago with a fund of about three and one-half million dollars, it now compares favorably in housing, equipment, and organization with the foremost research organizations in other parts of the world: our own Bureau of Standards, the National Physical Laboratory in England, and the Kaiser Wilhelm Institute in Germany. It has a personnel of 300, 112 of whom are technicians actually engaged in working out many varied problems in both pure and applied science.

When I visited it, many distinctly Japanese studies were under way, for instance: the perfecting of processes for the synthetic manufacture of vinegar, saki, and soy bean sauces; the manufacture, on a commercial scale, of vitamin A cod liver oil capsules; the extraction of vitamin C from green Japan tea; the development of pure chemical derivatives of human hair. There was unmistakable evidence of a thorough organization of investigations, and a definite procedure through the conventional small-scale studies to the final commercial-scale operations.

Another large organization is maintained by the national government for the study of combustion and fuel materials. It places its principal emphasis upon researches toward the economical utilization of coal and its derivatives because of the limited supply of fuels. The Institute has developed an improved type of low-temperature furnace which is particularly adapted to the type of coal used in the industrial plants of Japan. At Kyoto, the center of the Empire's artistic industries, is a national experimental station which makes a study of all problems relating to the technology and further development of the pottery trade. An extensive museum containing pottery from the pottery industries in all parts of the world, is being constantly used and referred to for design material, process technology, and development.

The Tokyo Industrial Research Laboratory is perhaps more intimately concerned with the problems of the industries than are the other government-supported organizations. The Institute is divided into five sections, including: chemical analyses; sections dealing with oils, wax, cellulose, wood, pigment, and non-metallic substances; a section for cement, tile building material; one for coal-tar derivatives and dye stuffs and their applications in industry; and a fifth being specifically charged with researches in iron and steel, mechanical testing, reinforced concrete structures, and electroplating. There in the oil testing section, for example, experiments are under way to perfect methods for the recovery of used oil and the development of vegetable oils for lubrication purposes on account of the relatively limited supply of mineral oils. Although the product resulting from the refinement of used oils is of a different color and a relatively low market value, there is enough margin in recovery costs to allow it to compete with new oil. Soy bean oil has been hardened by hydrogenation and used as a base for soap, and herring oil, formerly a waste product, has also been developed by the same process.

The electrotechnical section of the Laboratory has taken cognizance of the scarcity of natural bauxite by developing a process for making sheet aluminum entirely from clay, of which there is an abundant supply. At the time I was there, the process was in the semi-commercial stage, but inasmuch as production costs had been proved to be as low as those of the ordinary method, it is probable that manufacture on an industrial scale is already under way.

### III

The outstanding illustration of an industry that has been developed under the influence of Japanese science by Japanese technicians is the fisheries industry. Fisheries technology is more highly developed in Japan than in any other country, and fish and fish products are playing an increasingly important part in the economic life of the people. In the Japanese household their use is increasing at a rate that in the next ten years will double the consumption of these foods. Already the nation eats ten times as much fish as it does meat; here in America we eat ten times as much meat as we do fish.

Upon the Bureau of Fisheries of the Department of Forestry and Agriculture, which supervises the fisheries industry, rests the responsibility for increasing the

national output of fish and fishery products. It, accordingly, operates the Imperial Fisheries Institute, an organization that is the national center of scientific research and technical development of the fishery interests. Its work is supplemented by laboratories, experiment stations, and hatcheries where investigations are undertaken with a view to solving problems in zoology, life history, habits of various species, and improvements in technological process apparatus and methods of capture. One section of this Institute even operates a model tank and coöperates with designers of fishing vessels in an effort to lower operating costs and improve performance.

A research laboratory is maintained by the Hayatomo Fisheries Investigation Association, an organization composed of companies interested in different phases of the industry. Investigations include studies of fishing grounds, migrations of certain species, improvement of apparatus and gear, development of new methods of capture, handling, and refrigeration and improved design of fishing vessels and engines. In general, the problems are of a broad, fundamental character — of importance and value to the whole group.

One example of a process development which the laboratory initiated and carried through to commercial-scale production was the manufacture of a fish meal or paste which is now firmly established as a fish product commodity and sold in the markets throughout Japan. A superior grade, called Kamoboka, is made from species of fish that have a low market value as fresh fish; the inferior grade, known as Chicua, is made from the cheapest fish and scrap, and is sold largely to the poorer classes. The importance of this latter product as a staple article of diet is indicated by the volume of sales last year when ten million sticks were marketed by one company alone. In the Association laboratory was developed the entire process of grinding, molding, and cooking in accordance with the best automatic machinery and mass production practice.

The Kyodogyogyo, which, when translated literally means the Union Fisheries Company, is the largest single fisheries company in Japan, and it has large interests in most of the smaller trawling and inshore fishing companies as well. Its system of marketing and merchandising a catch is highly organized and elaborately scheduled to maintain a uniform market value — the result of many exhaustive studies of the problem. On shore, the central office of the company obtains from the principal market cities, the selling prices of the important varieties of fish for that day, and from a knowledge of the average demand in that city, it arrives at the wholesale price. This information is sent by radio to the captain of the fishing fleet who has previously informed the central office of his exact position and the amount and kind of his haul. The central office is thus able to direct the captain to the port that will be most profitable.

The highest development of fisheries technology, however, is to be found at the Mikimoto pearl culture stations, where oysters are made to build up pearls around a nucleus of mussel shell, artificially inserted by means of a surgical operation. Eight of the culture stations, covering 41,000 acres, are now in operation with an annual value of product approaching a million



dollars. The Gokasho Bay station, largest of the group, keeps seven million oysters under cultivation at one time, about a million of which reach maturity each year.

Essentially the process consists of inserting a polished sphere of Mission River mussel shell, about three-thirty-seconds of an inch in diameter, in the living oyster between the stomach and the kidney, after which the oysters are shelved in cages to protect them from the ravages of parasites, crabs, and other enemies. It is upon the success of this delicate operation that the success of the cultured pearl production depends. An empirical study was made which disclosed the best methods of protecting and nurturing the oysters to give ideal feeding conditions and the maximum production of pearls. Diving girls are employed as nursemaids to keep the cages clean and free from foreign marine growths.

The life cycle of the oyster is twelve years, but the nucleus is not inserted until the oyster is three years old. It remains in cultivation for five to six years, the period of prime activity and maximum production of the pearl essence. Culture pearls produced by this method are, by no known means of external observation, distinguishable from natural pearls. Even the x-ray can detect no difference.

#### IV

As I have already pointed out, it is not sufficient to compare Japan's industrial position with that of other nations in judging her. It must be remembered that she has attained her place in the economic sun in decades; other countries reached theirs in centuries. In the short space of fifty years she has developed to such a degree that I should not hesitate to place her in the fourth place in the organization of research among the industrial nations of the world, after considering the relative

amounts appropriated for research, the number of research agencies, their housing, equipment, personnel, and organization. Only Germany, America, and England surpass Japan. It will undoubtedly be argued with some vehemence that Japan has had her industrial pioneering done for her by others. To me it seems that the assimilation of our civilization by a people who are as racially and temperamentally alien to us as the Japanese is as deserving of credit as is our own development.

The Japanese people possess one fundamental quality necessary for success in research — an inquiring mind and a hunger for knowledge. No opportunity is lost by any Japanese in any station of life to come in contact with foreigners and to acquire as much new knowledge as the opportunity affords. Great care is taken to make a detailed record of newly acquired facts, and little time is lost in their application. The similarity between the national organization of research in Japan and the German system does not end here. There is in Japanese research workers that same thorough, painstaking patience in method and also the same skill and deftness in technique which have characterized the preëminent position of the Germans in research.

In general, the trend of research in Japan is towards an economical utilization of natural resources and a refinement of industrial processes, the substitution of cheaper materials, and the mass-production of articles which can be sold cheaply at home and abroad, rather than an organized effort to produce original processes or technique through scientific research.

With all of this before us, it is strikingly evident that Japan will soon make herself felt in commerce. The battle for the commercial and industrial supremacy of the nations is already shifting from the West to the East, and I predict that in ten years the battleground for this titanic struggle will be removed to the Pacific area.



JAPANESE LINDBERGHs

*Aviators Abe and Kawatchi reach Paris after a sixty-five hour trip from Tokyo*

Wide World



# News from the Classes

## *Association of Secretaries*

AS a prologue to and in conjunction with the 130th meeting of the Alumni Council, held in Walker Memorial on November 28, the Association of Class Secretaries convened for the first time since the pre-reunion conference on May 14, 1925. Presiding was Frederick H. Fay, '93, Secretary of the Association and a member of the group that organized it thirty-one years ago. He presented with admirable brevity the history of the organization that had founded *The Technology Review*, and recklessly revealed to a dormitory-seeking Alumni Council that the Association had \$1500 in its treasury. He next acknowledged the presence of two secretaries who had taken office since the last meeting: Gretchen A. Palmer, '18, and George M. Tompson, '73, and thereby neglected the eager young secretaries of 1925, 1926, and 1927 who likewise were attending their first meeting of the Association. Mr. Fay next adjourned the meeting, there being no discussion and no more business, and Professor Samuel C. Prescott, '94, President of the Alumni Association, took the gavel for the Alumni Council meeting.

## *The Secretary of 1914*

(Being the discourse held by two modern Greeks concerning a familiar figure.)

FLAVIANUS: Tell me, Autobulus, what thou knowest concerning Richmond, surnamed Harold Bours, amanuensis for the Epicureans of 1914.

AUTOBULUS: You ask me, dear Flavianus, to discourse upon a subject most difficult, time moving so swiftly. It bringeth to mind the admonishment of Labotus to one that had made a short and sketchy discourse: "A speech should be as big as the subject."

FLAVIANUS: True enough, Autobulus, and a nipping reply. But, forsooth, you know and can speak

of that escapade of his whereby he so nearly was drowned off Connecticut's rocky coast together with his companion, Alden Harry, the Waitt.

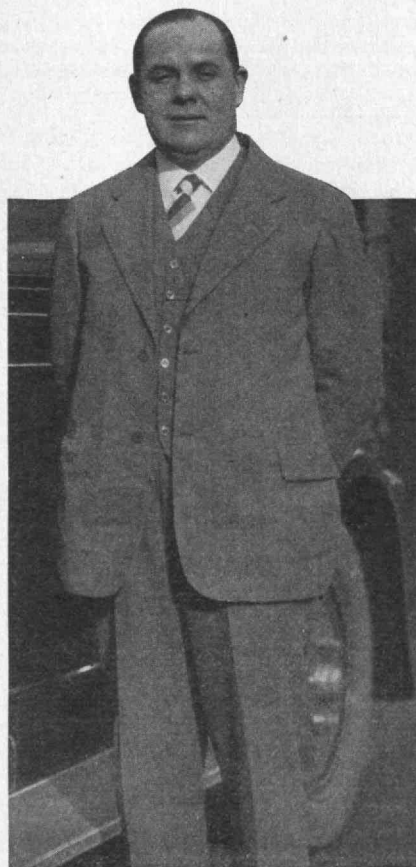
AUTOBULUS: Indeed, that is a tale worth the telling, how Rich and Waitt manoeuvred from the deck of a submerging submarine up onto the topmost part of the conning tower in much the manner of two men climbing one tree when pursued by a bull. It happened during the Dionysian Solemnities of the Class, their Ten-Year Reunion, which explains much in little. Porter Adams, he of the many stories, secured for those of his Class who desired it an opportunity to take a trip aboard submarines S-24, 26, 27, 28. With that restless, adventure-some spirit, which has so often distinguished him from other men,

well illustrated by his actions in upsetting waiters during the Class Dionysian Solemnities, celebrated as it came of age in 1914, Richmond with the Lacedaemonian surnamed Alden tired of the submarine's tight interior and climbed on deck to see what they could see. But the powers that be were perverse and put it into the mind of the commander to submerge. Forewith, deck hatches were battened down, all unknown to the two on deck. It was not until the conning tower hatch was being closed that the unwary pair didst realize their great peril and make their mad dash to the conning tower and thence up the periscope, as cold sweat bespangled their brows. Already the boat was well under when those below discovered the hapless two, like the snakes on Hermes's wand, entwined about the periscope. In the nick of time they were hauled below, limp and lax, a very chastened pair.

FLAVIANUS: Well told, friend Autobulus, and now tell me, what effect had this experience on Richmond?

AUTOBULUS: Naught, but to create in him a permanent fear of water in general and submarines in particular. Since then has he been a very serious, industrious man, foregoing the peccadilloes of youth to attend to his business and to make merry his fellows. And well has he succeeded; already has he attained to the dignity of what the moderns call a successful trader, being Treasurer of the General Radio Company. As amanuensis to his Class, he has assiduously set about to cultivate Clio, the Muse of History. Few so regularly and precisely record the passing show as does he the changing fortunes of his Class. With industry, too, has he cultivated the art of discourse, as well proved by the report he rendered to the Alumni Council last year, pinch-hitting, as modern jargon would put it, for Denison the Boeotian. Well did he do it, down to the hitching of the trousers.

Now it happens that there is yet



THE SUBJECT

*Harold Bours Richmond, '14. The accompanying dialogue gives enough of his life to explain his reputation*

another thing which he does with proficiency, and that is to vitalize and entertain his Class to the extent that few other classes are. Only last week one of the worthies of that Class didst report to me that he solely is responsible for the famed luncheons, dinners and festivals held by 1914. That he should do this to the satisfaction of those that worship Bacchus as well as those that have renounced him is his greatest glory.

But what need of multiplying more words in this matter?

FLAVIANUS: None, dear Autobulus. I go at once to find this man. A freeman after my own heart he is.

## Deaths

Additional mention of the following men, recently deceased, may be found in the notes of their respective classes:

J. GARDNER BARTLETT, '94. Course IV. Died November 11. He was one of the "best known workers in genealogical research in America or England."

LUCIEN W. BUGBEE, '94. Died September 11. For many years the factory manager of one of the largest optical manufacturing companies in the country, the One-Piece Bifocal Lens Company of Indianapolis, Ind.

LOUIS R. HENRICH, '01. Course IV. Died October 28. As an architect he contributed to the design of the Lincoln Memorial at Gettysburg, many buildings of the Berry School at Rome, Ga., the chapel at Bates College, and the recently completed Wesley Methodist Church at Worcester.

CHARLES L. POORE, '21. Course XV. Poore was an industrial engineer with the National City Company of New York.

CARL J. SACK, '23. Course VI. Upon graduating, he was employed by Gibbs and Hill, Consulting Engineers, New York.

HOWARD H. CYR, '25. Course VI. Died July 20. He was a sales engineer for the Industrial Controller Company of New York.

News of the death of the following men has come to The Review, and is recorded here, though not in the Class Notes:

FRANK W. VERY, '73. Course V. Died November 23. He assisted Langley for ten years in his epoch-making work in astronomy, collected material on thermodynamics of the atmosphere, coöperated with Per-

dam was better than any movie show. In eighteen hours the crest of the dam rose from less than two feet to just under fifteen feet. As the dam is just over 1,000 feet long, you can imagine what a fifteen-foot crest looked like, spilling over the top. Barns, camps and telegraph poles sailed over. Any structure that went over was promptly and efficiently converted into kindling wood. Sides and floors of barns made good rafts until transformed into toothpicks. The most common passengers scurrying around on these rafts were rats. One contained a pig, another a dog, but all met with disaster when going over the falls."—The opening paragraph of a letter (quoted in full in the 1914 Notes) written by James A. Judge, '14, vividly describing the flood situation at Holyoke, Mass., during the recent New England disaster.

The genial Secretary of 1896, he of the silk plug hat, sets about in this issue to heckle The Editors from his second balcony seat. His remarks about the aforementioned plug hat, obviously arise from a misconception of generic names and specific names.

Attention is respectfully invited to the college announced in the 1898 Notes,

the purpose of which is to prepare women for *inheriting and managing property*. Lo! the new Pierian Spring.

How editorial incentive leads men on to literary heights is illustrated in the 1900 and 1922 *opera*. The Secretary of the latter Class expresses a desire to exchange classes with any secretary prior to 1900. Should Dr. Tyler not accept the invitation, perhaps William G. Snow might.

Shakespeare has finally broken into this section, and of all places, in the 1905 Notes. Henceforth we shall think of Ros Davis as Little Gory Locks, even when he is playing first trombone in the Wesleyan University Band. The Association of Class Secretaries is an organization of many persuasions: with Denison at the pianola and Davis behind the trombone, it has the nucleus for an

**F**ORTY-FOUR of the fifty-nine Classes that have been graduated from the Institute had subscribed \$325,187.47 to the Dormitory Fund on November 28. Approximately \$800,000 more must be raised to complete the quadrangle. The record of participating Classes follows:

FOR ONE UNIT \* — \$80,000 to \$100,000  
1890 and 1901

FOR ONE FLOOR — \$18,000 to \$20,000  
1895 (2 floors) and 1892

FOR ONE ROOM — \$2,200 to \$2,400  
1868, 1871, 1877 (2 rooms), 1894 (5 rooms),  
1897 (7 rooms)

\$400 to \$2,200  
1872, 1874, 1875, 1876, 1884, 1888, 1891,  
1899, 1903, 1911, 1914, 1915, 1926

\$80 to \$400  
1881, 1886, 1905, 1909, 1917, 1918, 1922, 1925

LESS THAN \$80  
1870, 1882, 1902, 1906, 1907, 1910, 1912,  
1916, 1919, 1920, 1921, 1923, 1924

\* The gift from the Class of 1893, which three years ago made possible the erection of a double unit, is not included in this record.

cival Lowell in his studies of the atmospheres of the planets, made measurements of the surface temperature of the moon, was Director of the Westwood Observatory, and the author of "The Epitome of Swedenborg's Science."

T. HOWARD BARNES, '81. Died November 15. He was one of the foremost authorities on tropical engineering, until 1918 an engineer with the United Fruit Company, and from then until his death a consultant on sanitation, port improvement, and general engineering projects.

## Interesting Items in This Issue

"Aside from the thought of the terrible possibilities in case the dam should give way, watching the



orchestra of the first water. They should get one under way.

The action of George Patch, '25, in placing The Review in his high school library is worthy of note.—What is wrong with the American Tel. and Tel. Co. is explained fully in the 1912 Notes. One Rhodes of that class finally has hit upon a

name for some contraption that telephone subscribers have often cursed. Now they can do it more eloquently and specifically.—The work of Commander Jerome C. Hunsaker, S.M., '12, Sc.D., '16, formerly in charge of the professional instruction in the Institute's graduate Course in Aëronautical Engineer-

ing, is described in some detail in these 1912 Notes.

The Class of 1923 reports four births this issue, the Classes of 1914, 1922 and 1925 two each, and the Classes of 1921 and 1925 one each. Of these twelve, eight are girls, three boys, and the sex of one is not reported.

**'84** Announcement is made of the appointment of Mr. George L. R. French as general manager of the Rutland Railroad in succession to the late George T. Jarvis, '84. French has had a varied professional experience, beginning with the Chicago, Burlington and Quincy on graduation, and continuing since 1889 with New England lines. He has been associated with Jarvis on the Rutland for a number of years.—HARRY W. TYLER, *Secretary*, Room 2-261, M. I. T., Cambridge, Mass.

**'88** Charles A. Stone has recently returned from Europe.—It's not too early to plan for the Fortieth Reunion which will be held at Great Chebeague Island, Portland Harbor, June 29, 30, and July 1. B. R. T. Collins, who summers there, has already made the necessary tentative arrangements, so remember the dates.

Adelbert F. Mead, 27 Jason Street, Arlington, Mass., who was with us for two years at Technology, wrote the *Secretary* recently stating that he had retired from the firm of A. and O. W. Mead and Company, Produce Commission Merchants. He had been engaged in this line of work ever since leaving the Institute.

The *Secretary* did not correctly report in the last issue the yachting experiences of Walter K. Shaw during the recent season. Instead of two Bar Harbor thirty-one footers, one was a fifty footer named the *Andiamo* which received credit for winning five firsts out of ten starts.—WILLIAM G. SNOW, *Secretary*, 112 Water Street, Boston, Mass.

**'90** *Water Works Engineering*, a journal of the water works profession, carried a note in its issue of November 9 saying that Charles W. Sherman has been honored by an English journal. "An American water works consulting engineer of note has been honored by the leading English journal of this field, *Water and Water Engineering*. In its issue of October 20 it published a full page portrait of Charles W. Sherman . . . and accompanied it with the following sketch of Mr. Sherman's career, under the caption 'Men of Note in the Water World': 'Charles W. Sherman is a member of the consulting engineering firm of Metcalf and Eddy, of Boston. . . .'"

F. P. Royce is chairman of the special gifts committee of one hundred to raise a million-dollar fund for the Free Hospital for Women of Boston. This is the first appeal

made for this hospital for funds in the half century of its existence.—The address of Thomas N. Codman is South Lincoln, Mass.—William G. Plumer is located at 3431 Mapledale Avenue, Cleveland, Ohio.—Calvin W. Rice's home address is 45 North Fullerton Avenue, Montclair, N. J.

Leonard C. Wason, President of the Aberthaw Company, has moved his office to 80 Federal Street in the Chamber of Commerce Building. He spoke at a meeting of the nation's leading contractors, held at Birmingham, Ala., October 17-20, where he compared construction methods and costs in Boston with those of other major cities.

George A. Packard sends me a clipping which says that Charles Hayden, of Hayden, Stone and Company, left in November for a round-the-world pleasure trip. He expects to be gone several months. "They are leaving California and will visit the Hawaiian Islands, Japan, Korea, China, the Philippines, Indo-China, Siam, the Malay States, Java, Sumatra, Ceylon, India, Persia; across the Iraqq Desert; and return home via Damascus, Aleppo, and Constantinople."

The Boston papers announced that "Dr. Gary Nathan Calkins, former biologist to the State Board of Health of Massachusetts, who has been doing research work at the American University Union at Paris for the past year, has completed his term and returned to the United States where he will resume his work at Columbia University. While abroad Dr. Calkins visited sixty-five Continental universities, where he discussed science. The result of his work has been to acquaint scientists with the importance of the work of the University Union in advising students, and in bringing about an understanding between the objects of the American and European researchers."

Jim Clark's boy, Kennedy, is a student at Chauncy Hall School in Boston. He is rooming with Mrs. A. C. Aldrich at 34 University Road, Brookline. Some of you chaps who knew Jim well might call up the boy and tell him how Jim did or did not behave while in Technology. The boy expects to go to Technology later, so let him see what his dad's classmates are like.—GEORGE L. GILMORE, *Secretary*, 57 Hancock Street, Lexington, Mass.

**'92** No notes have been received by The Review Editors from the *Secretary* of this Class for inclusion in the January issue. The *Secretary* received the usual notification that copy was due, accompanied by such news as had been compiled in The Re-

view Office. Members of the Class having news or inquiries should address them to JOHN W. HALL, *Secretary*, 8 Hillside Street, Roxbury, Mass.

**'94** L. R. Nash, Vice-President of Stone and Webster Company, was recently one of the engineers who testified in the hearings at which the United Traction Railways Company of Baltimore presented its arguments for a ten-cent fare which, it was claimed, was essential to efficient service in Baltimore. Nash's long experience in management of street railway properties in various parts of the country, as well as the intensive and careful study which he has given to management problems, made him an especially competent and convincing speaker on this subject. It will be recalled that Nash published, a year or two ago, a book dealing with the financial aspects of such public service utilities.

Joseph Gardner Bartlett, widely known as a genealogist, died suddenly, on November 11, at the Massachusetts General Hospital, after an illness of several weeks. Bartlett was born in Boston, August 25, 1872, the son of Dr. Joseph E. and Antoinette (Carpenter) Bartlett. He entered the Institute with the Class of 1892 where he took up the course in architecture but did not remain to graduate, as his interest in genealogical and historical research exceeded his desire to practice architecture. Since 1904 he had devoted all his attention to genealogical matters, and was one of the best known workers in genealogical research in America and England. For a number of years he had been closely associated with the New England Historic Genealogical Society, where his services and marked ability in the field of historic genealogy were very greatly appreciated. In addition, he belonged to the Genealogical Society of Pennsylvania, Massachusetts Society of Colonial Wars, The Sons of the American Revolution, and a number of other historical societies. He was the author of ten or more books dealing with the genealogy of various New England families of New England origin, and frequently spent long periods in London and other English cities in securing the details of the early history of these families. On September 4, 1917, Mr. Bartlett married Miss Elizabeth French of New York, who was also well known in the same field of research as her husband, and who worked in collaboration with him after their marriage. To her and his brother, Professor Dana P. Bartlett, of the Department of Mathematics, well known to all '94 men,

1894 Continued

and to his sister, Miss Caroline T. Bartlett of Brighton, the sympathy of the Class is respectfully extended.

We also regret to report the death of Lucien W. Bugbee, for many years the factory manager of one of the largest optical manufacturing companies in the country, the One-Piece Bifocal Lens Company of Indianapolis. Mr. Bugbee entered the Institute with '94, but did not stay through the four years, as he left to take a position with the American Optical Company at Southbridge, Mass. After service for many years at this plant, he assumed the administrative position at Indianapolis, which he held until the time of his death. He died on September 11. He leaves a son, Lucien W. Bugbee, Jr., a member of the Class of 1921, to whom, and to the other members of the family, the sympathy of the Class is extended.

After being among the members for whom no address was known for a long time, Clyde N. Friz has recently been located. In a letter to the Alumni Office he gives his address as 1523 Munsey Building, Baltimore, where he is practising architecture, the profession which he studied at the Institute. Any members of the Class who happen to be in Baltimore should take pains to get in touch with him again.

The Secretary and his wife recently had a most enjoyable opportunity to renew acquaintance with Mrs. Darragh DeLancey (Miss Gallop), her husband, Darragh DeLancey, who was a member of the Class of '90, and their charming daughter. Mr. and Mrs. DeLancey feel the pull of Boston very strongly, and frequently drive up from their home at Waterbury, and thus maintain their close contact with Institute affairs. It was on one of these visits that they were most charming hosts to the Secretary and Mrs. Prescott at the Copley Plaza. Mrs. DeLancey has retained all her enthusiasm and interest in matters pertaining to the Institute activities, and especially to those concerning young women students at the Institute. It so happens that the Secretary was brought into contact with Mr. DeLancey at Washington during the period of the war and acquired for him there a warm friendship and great admiration. Mr. DeLancey is notable as an instance of a man who has been highly successful in his profession, and then has turned to an avocation in which he has also achieved distinction. In recent years he has devoted himself to a study of art, has acquired a degree from the Yale Department of Fine Arts, and is deeply interested both in the technique and the practice of sculpture and frescoes.

The Class Committee on Dormitories will take this opportunity to urge upon all members of the Class who have not done so to forward their contribution or pledges for the '94 dormitory. It is strongly hoped that it may be possible to announce the success of the '94 dormitory campaign at the annual dinner of the Alumni, but to do this the Committee must have the cordial support of the Class. Let's get together and put this thing across quickly for it is one of the finest services the Class can render to the Institute. To date the Class has contributed enough for five rooms. — SAMUEL C. PRESCOTT, Secretary, Room 10-405, M. I. T., Cambridge, Mass.

'95

The drive is on for funds for a Dormitory Unit in memory of the Class of 1895. This undertaking should be the supreme effort of the Class. The goal is nominally \$100,000 and, while approximately half of this amount is subscribed at this writing through the generosity of a few, the balance must be obtained from the rank and file of the class membership, and it is earnestly hoped that every one will do their best and subscribe immediately so as to complete our task as quickly as possible. You have been duly canvassed. Please act at once. Get in touch with your Secretary.

Through the courtesy of Gerard Swope, we are delighted to quote from a letter to him from David B. Weston, '95, who is now in South America: "This is my first trip to South America, and I find it very interesting, but the opportunity of making an electric plant appeals to me because I have always found them so efficient in sugar factory work. You know I was in this work at the start in Cuba, but I can say it is some test of Technology training to be your own civil, electrical, and mechanical engineer, and I do not want to go wrong in attempting to obtain power from this river. The only disadvantage I can see is that the banks are sandy, and but twelve feet high at the best, so there is no chance to get a dam to impound the water. We must use a low head turbine, and a pipe, or flume. We can cut the river for a fall of a few meters.

"Sorry not to have been able to attend any of the New York Technology meetings and meet you all again. I understand that Brackett has joined the New York force."

We quote the following from the Prudential Insurance Company *Weekly Record* of October 24: "At a meeting held on October 10, the board of directors elected John T. Dorrance, President and owner of the Campbell Soup Company, a member. Mr. Dorrance is a graduate of Massachusetts Institute of Technology of the Class of 1895. After receiving his degree of S.B. from that institution he studied at the University of Göttingen, Germany, for two years, where he was given the degree of Ph.D. in chemistry. Mr. Dorrance originated the idea of condensed soup, and has built the Campbell Company into one of the largest business organizations in America.

"He is a director of the National Bank of Commerce, New York; the Girard Trust Company and the Philadelphia Girard National Bank of Philadelphia; and the Pennsylvania Railroad. The *Weekly Review* wishes Mr. Dorrance a long and happy tenure as a member of our board of directors."

May you all enjoy the blessings and best wishes for the New Year. — LUTHER K. YODER, Secretary, Chandler Machine Company, Ayer, Mass.

'96

There is a dearth of news for this issue and the Secretary is, therefore, going to take the opportunity to say a personal word regarding the write-up of himself which the Editors gave in a preceding issue of *The Review*. The Review Editors exercised their journalistic liberty to the *n-th* degree, and, if they could be believed, the Secretary of the Class of 1896 is a very important individual

who is wasting his time as a teacher and who should plunge immediately into publication work, with the expectation of becoming a William Randolph Hearst. [The imputation of such a crass and unbecoming expectation was unintentional — The Editors.] English words seem to fail them in their description and they were forced to fall back on German to express properly their ideas and to impress their readers with their editorial knowledge. Fortunately, a cut was used which did resemble the Secretary, and was unlike some of the cuts of Dr. Coolidge which have appeared in print and which have borne no likeness whatever to our distinguished classmate.

Unfortunately, the Editors, in their soaring flight of imagination, allowed one or two untruths to appear. The first was in regard to the famous silk hat which, as classmates know, is not a silk hat at all but is an opera hat. A silk hat could not have possibly survived the trying times of the reunions which it has attended, but the collapsible variety rises again every time after strong efforts of Henry Jackson and others to crush it. The Sabbatical year which *The Review* Editors gave the Secretary was a beautiful thing to read about, but the Secretary has never known anything about it until the statement appeared that he had been on the job continuously except for one year. To the best of the Secretary's knowledge he has been on the job continuously since 1908 and therefore the Editors should have blue penciled "except for one year." ["Except for one year" should have read except for one month, the month the Secretary was prevented from submitting notes to *The Review* — The Editors.]

After reading the account of himself, the Secretary was so puffed up that he was inclined to withdraw while at the pinnacle of fame, but after consideration, during which time he has returned to normal, he has decided to continue his services of class officer as in the past.

Classmates may be interested to know that at the October meeting of the Alumni Council an official vote of regret was passed on the death of A. D. MacLachlan who had served as a faithful representative of the Portland, Oregon, Alumni for a period of fourteen years.

This issue is notable in that no official report is available on the work of Hultman as Fire Commissioner of Boston, but Dr. Coolidge continues in the public eye in that he recently received the Hughes Medal of the Royal Society in London. If Coolidge keeps on this way and decides some day to decorate himself with all of his medals, he will outshine even a South American general in the elaborateness of his display and may come to a point where it will be necessary to secure the services of an assistant to help carry the load, or else develop his physique to the point where he can tote them all personally.

Rockwell reports that young Edwin Palmer is coming to him regularly for treatment by the ultra violet ray and now that the lad is getting his regular leg exercises after the lapse during the summer at camp, he is further along toward permanent recovery than he has ever been before. — CHARLES E. LOCKE, Secretary, Room 8-109, M. I. T., Cambridge, Mass. JOHN A. ROCKWELL, Assistant Secretary, 24 Garden Street, Cambridge, Mass.



**'98** Probably by the time this issue of *The Review* reaches you, you will have received direct from the committee in charge of the Thirty-Year Reunion the details as to the time and place. At all events, count on its coming early next June.

The other day Seth Humphrey gave a lantern talk at the annual dinner of the Faculty Club of M. I. T. and told of his experiences on his recent trip through Central Africa. Seth is possessed in high degree of a power of critical observation, and he also has the power of expressing himself interestingly and clearly, with frequent touches of humor.

Another of Roger Babson's enterprises is scheduled to open January 4, 1928, namely, Webber College for preparing young women to inherit and manage property, at Babson Park, Fla. The following extracts from the announcement give some idea of the scope of the college: "Through making this work in the financial management and care of property available for young women, Mr. Babson hopes to be of material help in assisting fathers and mothers to get their daughters started on the right track, in preparing them for the business and investment problems the coming years will bring. . . . The College opens Wednesday, January 4, 1928, and closes the latter part of April, making a course of about sixteen weeks. This permits students to be at home over Christmas and to be in Florida during the season when parents are most likely to be South. The intensive instruction, however, should enable students to obtain in these four months, with outdoor conditions, what would be acquired in an ordinary school year from October to June, with crowded conditions. . . . The tuition is \$1,200 including room and necessary books, as above described; but not including table board, electricity, or laundry."

Another big industrial merger has involved the insulated wire and cable manufacturers. We recall that a few months ago, George Cottle merged his company with two similar companies into the Safety Cable Company. This company is now combining with four other companies into what is to be called the General Cable Corporation.

Frederick C. Gilbert reports that he is now at the Montana School of Mines at Butte. G. W. Craven, also '98, is President of the school. Gilbert says that since 1923 he has been engaged in prospecting and mining. Prospecting for mineral deposits and collecting old Spanish antiques are his hobbies.

Bill Perley has been in San Francisco since 1923, where he is making lactic acid and shipping a good deal of it back east. He says he manages to be at most of the meetings of the San Francisco Alumni Association and that he ran into Frank Coombs the other day. — ARTHUR A. BLANCHARD, *Secretary*, Room 4-160, M. I. T., Cambridge, Mass.

**'99** Clifford M. Swan has sent out announcements that he has established a personal consulting practice in acoustical engineering at 17 East 42d Street, New York. He was formerly with the Johns-Manville Corporation.

C. A. Smith, superintendent of the Roadway Department, was one of the delegates of the Georgia Power Company to the forty-

sixth annual convention of the American Electric Railway Association, at Cleveland, Ohio, October 3 to 7, and he was one of the busiest delegates there. At the request of President Durie of the American Engineering Association he discussed a paper entitled "Track Construction and Maintenance Economics," that was presented by Frank B. Walker, chief engineer of the Eastern Massachusetts Street Railway Company of Boston. Mr. Smith is a recognized authority on street railway construction and as such is in much demand on the speakers' platform at street railway conventions. (This is a good thing for us to remember. Our Thirtieth Reunion is not far away, and we will be needing good speakers.)

Arthur Brown rose nobly to my last appeal. I quote as follows: "Regarding news items, I wish to offer you my deepest sympathy for the burden placed upon you of providing class news for *The Review*, but I have nothing more than sympathy to offer. My life is about as unspectacular as could well be imagined. I live ten miles out of Boston in a section of the city of Newton called Waban. Every day I arise, take the train, sometimes missing one and taking a later one, and sometimes getting an earlier one than usual. I then spend the day in my office performing the various duties of a patent attorney, except that I do not appear in court but occasionally, for my practice is mainly before the Patent Office and in my own office. I go home about the same hour each day and spend the evening in one or another of the few ways available to the average citizen.

"If you want statistics, I have been married going on twenty years and still have one wife — the original one — and two boys, aged respectively fifteen and thirteen years. If this is news make the most of it. I am sending you herewith my check in payment of Class Dues, being forehanded in the matter for fear of forgetting it altogether if I should procrastinate. It is very unusual for me to be thus forehanded about anything." I consider myself thrice blessed in this contribution from Arthur Brown. He contributed sympathy, news and dues — all three of which are equally important and welcome.

The following paragraph from *The Review* Editors gives one cause to think: "Since the appearance of the November issue of *The Review* we have had unprecedentedly few complaints about this and that. It is an ominous situation. Are the Class Secretaries themselves reading the news?" Are they? This one is. Now I'll ask one. "Are the class members reading the news?" And equally pertinent is the query, "Are they contributing news?"

Arthur Brown offered his deepest sympathy and this is gratefully accepted, for if the contributions were a little heavier the burden of your Secretary would be a little lighter. Arthur knows whereof he speaks. He is Assistant Secretary, and sometimes he is called on to provide a column. We can both sympathize with the old Israelites who had to make bricks without straw!

Arthur Hamilton's diary, kept during his trip through Brittany a few weeks ago, has not yet come to my desk, though I asked him for portions of interest to class members. This seemed to me a modest request, for we all like to hear of the trips and good times of

our friends. Samuel Pepys wrote a diary several centuries ago and became famous thereby. He is famous today, but he is dead. We will continue to hope that Arthur will send us the story of his journeyings for a later issue, and not leave his diary to be deciphered three hundred years hence when we will, perchance, have lost our interest therein.

The Class of '99 now belongs to the Eight-Issue Club and we are pledged to send in some news for every issue. If you will not provide me with news, I will have to provide it myself, and the results be on your own heads.

I called on B. Harman, chief engineer of the Southern Railway, a few weeks ago and we had a nice little visit. On October 28, I visited the Institute and Arthur Brown arranged a dinner meeting at the University Club that evening, with about a dozen '99 men present. We took occasion to make tentative plans for the Thirtieth Reunion which is to be held in June, 1929. We want this meeting to be a real get-together for the members of '99, and it is none too early to begin to plan for it. In a later issue I will give you a list of the places personally inspected by me as possible reunion centers. — W. M. CORSE, *Secretary*, 810 18th Street, Washington, D. C. A. H. BROWN, *Assistant Secretary*, 53 State Street, Boston, Mass.

**'00** The recent mandate of the new editorial staff is lying heavily on the literary lobe of your Secretary's brain, causing complete numbness and incipient atrophy. No longer is he free to ramble at will through the lilting lines of these neophytic notes, leaving a literary trail emblazoned with exclamation points, italics, slang, and short paragraphs. Lengthy, verbose introductions and poetry are taboo, and photographs must be paid for at the rate of \$6.00 per column inch. Shades of the Muses! What a descent from the heights so long reached and kept by sudden flight. But youth must be served and we bow to the inevitable, hoping that in these halting, stilted lines the reader may find something remindful of the humanistic note of a dead past.

Steve Badlam is alive! Yes, actually alive and living in the clear, life-giving atmosphere of Pittsburgh. After years of uncertainty and doubt, during which time the various secretaries have endeavored to trace his whereabouts, he has suddenly resurrected himself as a loyal member of 1900. Some days ago Bugbee called us on the telephone and excitedly announced that he was holding a man whom he suspected to be Badlam in his office, and suggested that we come at once and assist in the identification. You may well believe that no time was lost in making the trip. It was Badlam all right, but only his old-time smile, smart appearance and never-to-be-forgotten voice made the identification possible. He had changed. Long association with the grimy atmosphere of the steel works had caused him to part with all those hirsute adornments which had once made him the envy of his sophomore mates and, what might have remained, if he had had his own way, time had unmercifully removed. It was Badlam, nevertheless, and not one whit less interesting and delightful than in the old days. We spent a short half-hour

1900 Continued

together and then parted with the understanding that the Secretary was not to write him and that no reply was to be expected if he did. Badlam has been true to his first love and has never left the steel business. After years of association with the Pennsylvania Steel Company as their mill superintendent, he has instituted an office as consultant engineer on all things pertaining to the design and operation of rolling mills. Very recently he presented a notable paper before the American Iron and Steel Institute at Hotel Commodore, New York, on "The Evolution of the Wide-Strip Mill," a field with which he has long been identified as a pioneer and developing genius.

From Jouett in Cleveland comes a nice note saying that he is saving up to buy the Secretary a gold medal for valorous conduct during the last four years. This is nice also, and we hasten to publicly acknowledge this promise. Jouett is still busy with his Cleveland Terminal and hopes that two more years will see it in operation. The first unit of construction, the fifty-two storied tower and office building, is nearly finished and he is looking forward to 1930 as the year in which he can celebrate our Thirtieth Reunion and the completion of a ten year job. He recently motored through all the New England states, spending a week at Harwich on the Cape, where he and Louis Crowell managed to have quite a little game of golf. He even remembered East Bay Lodge and took the pains to motor over to Osterville and see the place where we spent those short happy hours in 1925. He reports Crowell as up to his neck in his cranberry bogs—he should have said business—and very much in fear of being caught by an early freeze. He occasionally meets Harry Grant in Cleveland where Grant is associated with the Western Electric Company. —George Archibald visited Jouett last winter but has since disappeared in the wilds of his beloved Canada. Will somebody please page Archibald and tell him we are calling?

Russell spent his Thanksgiving with Thurber at the latter's home in the Navy Yard at Portsmouth, N. H. With his fine sense for accuracy in detail, he wishes to state that the Yard is really not in Portsmouth or even in New Hampshire, but is on Seavey's Island in the Piscataqua River, and therefore within the confines of the State of Maine and the town of Kittery. The misnomer is wholly due to the political machinations of congressmen long dead to the world and to all sense of right and justice. Thurber was transferred last June from the Boston Yard where he had been stationed for three and one-half years. He has recently been up before the examining boards for promotion to the rank of Captain and is hoping that Congress will soon tell him that his appointment has been confirmed. This is very pleasant to hear and we congratulate him. His older son, Robert, graduated from Princeton in 1926 and is now pursuing law at Harvard Law School. His younger son, Roger, is in his junior year at Princeton.

A rather imposing document of about the size of a metropolitan telephone directory has just made its appearance in the Civil Engineer Corps of the Navy. It came from the facile pen of Commander Frederic H. Cooke, Chief Engineer of the Direction Generale des

Travaux Publics in the Republic of Haiti, and constitutes a yearly report made by him to the Secretary of State of Public Works. Now it isn't any news that Fred is down in that unenlightened corner of the globe, nor is the Class unaware of the splendid work he is doing in the rehabilitation of that benighted island, but just because some of you may think he is wasting away under the strain of his isolation, we wish there was no tariff of six dollars per column inch for the insertion of photographs. Both our exchequer and the column would suffer, however, and possibly the tariff is a wise provision. No, Fred is not wasting away, if a print showing the engineer force on the island is correct. The picture might well have served years ago to represent W. H. Taft and his staff when he was governor of the Philippine Islands. No, Fred is in perfect health. —GEORGE E. RUSSELL, Secretary, Room 1-272, M. I. T., Cambridge, Mass.

'01

It is with deep regret that I record the untimely death of our classmate, Louis R. Henrich. A brief notice in the *Boston Evening Transcript* of November 2 contained an appreciation of him and of his work. I quote in part from this: "His high standards, not only in his chosen profession but in his personal affairs, which guided all his work and relationship, were soon sensed and respected by all with whom he came in contact. On matters of principle, whether of design or conduct, he never compromised. His analysis of every problem was clear and exhaustive. His imagination was rich and courageous, but sound, and held under conservative control. His respect for his work was reinforced by a contempt and impatience for any and every solution of a problem, large or small, which was trivial or makeshift. With the most difficult and impossible problems he would persist until a clear, logical and beautiful solution was attained. He relished and glorified in a tangled architectural difficulty, and would attack it with a quiet, steady confidence that always put heart into his fellow workers."

"The Lincoln Memorial at Gettysburg, done soon after receiving his degree of Master of Science at the Massachusetts Institute of Technology, a large part of Tower Court and Claffin Hall at Wellesley College, many buildings at the Berry School at Rome, Ga., the chapel at Bates College, and the recently completed Wesley Methodist Church at Worcester, are a few of the structures which are what they are because of his skill."

This tribute by Edward M. Bridge, '13, is supplemented by the following statement from Harry Carlson, '92, with whose firm he was associated for the greater part of his professional life: "He was with us from August 1909 to May 1918, and again from May 1922 to 1927. He was never satisfied except with the best and with such an unusual ability in design that he succeeded in giving distinction to all of the work that came under his hand." Henrich is survived by his wife and six children.

As many of the Class know, rowing at Technology has assumed the position of one of the really major activities of the undergraduate body. Although the game is ordinarily regarded as a highly expensive one,

it has been possible to carry it on with a steadily expanding program, in no small measure as the result of the generous support of individuals. Some two years ago, through friends in Oxford, I was able to purchase at second-hand a shell which had been used in the previous year by the University crew, and since that time have secured two more, nominally second-hand shells which have been used for only one race. The superior quality of this equipment renders it most desirable, and a continuance of the practice a goal for endeavor. Thanks to the generosity of Lamont duPont of our Class we are in a position to buy two shells next year with the even more encouraging prospect of a possible continuation of the arrangement in subsequent years. Following the time honored convention, names will be given to them and it is the wish of the donor that the two shells which we shall acquire next summer shall be known respectively as the "Christiana" and the "Brandywine." For the benefit of the Old Guard I will say that this latter refers to one of the lovely rivers of Lamont's natal state and not to a recent violation of the Volstead Act. These shells will be delivered next summer after the English racing season is over.

Nat Patch has just written in to tell me that George Fisk, who is first assistant city engineer of the City of Buffalo, has just been elected President of the American Society for Municipal Improvements. George is regarded as an authority in this field, and has already headed a number of important committees dealing with pavement, street railway, and track construction. He is one of the members of the permanent committee of the U. S. Department of Commerce on problems connected with paving, a member of the American Highway Traffic Association, of the American Society of Civil Engineers, and numerous other learned professional bodies. (It is said that his aim with a half-brick is unerring.) A clipping from the local Buffalo paper offers numerous additional details and includes a picture of George in which I recognize a persistence of his youthful smile, but not of his hirsute adornments. Without having lost his pretty girlish figure I should say that George belonged to the well nourished section of the Class. Speaking of which, I am sorry that Nat did not send me a picture of himself as well. He was, I think, the tallest man in the Class and of a delicate and gracile slenderness. Whether this latter has persisted, I cannot say, though we are looking forward to a foregathering at the time of our Thirtieth Reunion which, as those of you who still retain a mastery of simple arithmetical processes know, is due in June, 1931. Nat is still with the Lumen Bearing Company of Buffalo, which at one time also enjoyed the services of Perk Parrock.

A little note from the Strawberry King has just reached me, he having returned to his baliwick in Charlottesville. Al is going in for literary exercise at the present time and those of you who read the *American Mercury* may find there, possibly, a series of little essays on the more domestic aspects of public utility. Al, by the way, tells me that Harry Lohbiller is now with the American Power Piping Corporation in St. Louis. And I had supposed the distilling industries eliminated from our economic life.



1901 Continued

Harry V. Allen of Maplewood, N. J., is in sales engineering, his present association being with the Elliott Company of New York. They specialize in power plant equipment. — Ralph Whitman, now a Commander in the Navy, is at present stationed at Norfolk, Va. Sometime ago I was able to give the Class some carefully edited statements concerning his wanderings which have been extensive and varied.

I wonder if many of you remember one William Dooly, who was with us for a brief space of time in a period when several well known popular songs were built about his patronymic. From Bill Pepperell comes the news that Dooly is in New York, and that he is primarily responsible for the realization of the new two-and-a-half million dollar textile high school which the city is erecting. A picture accompanying the article shows no substantial change in Dooly's features other than a partial loss of that portentous gravity which was the characteristic expression of his somewhat Cromwellian lineaments. Time has changed us all. The years have modified even that note of harshness and self-absorption which distinguished Freddy Boyd at such time as he regulated the destinies of the big bass drum. Only once in that hectic year did Freddy lose his stern self-command. Those of us who saw him emerge from the interior of the instrument will never forget his ingenuous bewilderment.

Happy New Year! — ALLAN WINTER ROWE, *Secretary*, 4 Newbury Street, Boston, Mass. V. F. HOLMES, *Assistant Secretary*, 131 State Street, Boston, Mass.

**'02** At the Class Luncheon the second Tuesday in November, Patch, Philbrick, Fowler, and Hunter were on hand. Classmates from out of town should bear in mind that the second Tuesday is the day they are sure of finding '02 men at the Technology luncheon at the University Club in Boston.

Before this issue of *The Review* reaches the classmates, the reunion movies will have been exhibited in New York at the party to which President Place has invited the New York classmates on the evening of December 9. The film will be shown in Chicago early in January. Vice-President Millar will send particulars to the local men. There will probably be a showing of the pictures in Boston some time in February. — FREDERICK H. HUNTER, *Secretary*, Box 11, West Roxbury, Mass. BURTON G. PHILBRICK, *Assistant Secretary*, 246 Stuart Street, Boston, Mass.

**'04** After the copious amount of notes in the November issue, it was almost too much for the Secretary to expect to have any large contribution for the current issue, and as his expectations were quite small, they have been fully gratified.

Early in November, Selskar Gunn was in New York City to attend a meeting of the Board of Directors of the Rockefeller Foundation. After assisting in settling numerous matters of large importance at this meeting he paid a flying visit to friends in Boston, and while in this city, he dropped in for a half hour visit with the Secretary. Gunn hopes to be in this country again in the spring, and if

his hope is fulfilled, he expects to attend the annual reunion of the Class.

Other visitors at the Secretary's office recently have been Dave Sutton and Gene Russell. On the occasion of Dave's visit the Secretary was out and Dave left word that he would call again, for which call the Secretary is still waiting. Gene Russell is the member of the Class who makes the most visits to the Secretary's office, and Gene usually brings news of seeing other members of the Class and quite a fund of information. On his last visit the principal topic of conversation was the summer residence which Gene had just erected at Scituate. Some time in the future it may be possible to hold the Class Reunion at this spot, although the subject has not yet been broached to Gene. According to Gene the cottage has a cellar and an ice chest and everything, and plenty of sleeping room on the lawn, so that the hardy members of the Class would probably enjoy it very much. Applications for reservations should be made direct to E. H. Russell, Jr., 100 Milk Street, Boston.

This small amount of Class Notes will prevent *The Review* Editors from inserting that well known statement that "No communication was received from the Secretary, although the regular notice accompanied by such notes as have accumulated in *The Review* office were sent to his last known address."

In closing the Secretary wishes to extend the greetings of the season to his classmates, with the wish that the coming year may be one of prosperity and happiness. — HENRY W. STEVENS, *Secretary*, 12 Garrison Street, Chestnut Hill, Mass. AMASA M. HOLCOMBE, *Assistant Secretary*, 3305 18th Street, N. W., Washington, D. C.

**'05** Francis Drake writes: "On October 1, I changed my job. I am now gas engineer for the Associated Gas and Electric Companies and located at 140 Main Street, Oneonta, New York. The Associated Gas and Electric Companies is the operating division of the J. G. White Management Corporation, 33 Liberty Street, New York. I supervise all gas operations pertaining to New York State properties, seven in number, and a little later I expect to extend my field down into Kentucky and Tennessee where they have four more properties." This is quite a shift, from the Lynn marshes, and we wish Frank all success.

Regarding the Cowdrey Brake Tester referred to in the November notes, Irving Cowdrey writes: "I must refuse to accept the nomination, or as Macbeth says, 'Shake not thy gory locks at me, thou canst not say I did it' (which is a deuce of a thing to call a Class Secretary). No, I did not invent the dynamic brake tester. It was evolved by my uncle." And then he admits that he did have something to do with it which we knew all the time.

Myron Helpen's Touraine Glove Company is still expanding, a fourth store recently being opened in Boston. Sid Strickland drew the plans for all four. Who will deny that the sale of Touraine gloves has not been enhanced by the surroundings of Georgian splendor? Helpen writes: "If up-to-date ideas are a sign of youth, Sid can certainly lay claim to being young."

The Boston and Maine Railroad recently announced plans for a great new terminal on the site of the old North Station. There will be included a hotel and a coliseum, over the main waiting room, that will make old Mechanics Hall look like a one-car garage. The total cost of the entire project, one of the greatest operations in New England, will be about \$10,000,000. And an '05 architect, George Funk, is the man behind the gun. We should all follow the construction with added interest.

In the report of his trip around the Cape, your Secretary failed to note that when he was driving along in the vicinity of Hyannis, he suddenly came upon a long low building that looked strangely familiar. It was the dance hall where Grove Marcy had his experience during the reunion of 1923. Anybody at that party would have smiled.

George Jones has recently added a "Chemist-Engineer" to his letterhead, not that George is posing as such, but he seems to have added one to the firm as Kenway did. Perhaps it is now a necessity for a counselor in patent causes. George writes: "I wish Kenway every success and have not forgotten that he first introduced me to the Patent Office in Washington in 1906, and that my conclusion to try the new field was reached after corresponding with him at the time he was an examiner in the Patent Office, while I was at the Lackawanna Steel Company in Buffalo. He gave me my first insight into the point of view of the mysterious 'man skilled in the art.' My son Bayard is a freshman in Amherst this fall." Will somebody please report a son at the Institute?

Ralph Tarbett has moved from Texas to Norfolk, Va., Box 1428. He is still with the U. S. Public Health Service. — R. D. Gatewood read a paper at the annual meeting of the Society of Naval Architects and Marine Engineers on "The Engines of the Shipping Board Diesel Conversion Program." — Bob Adams has the prize address this time, Yreka, Yreka, California. Honest! — Several personal letters have not even been acknowledged. Did you get one? — The Boston crowd is meeting for luncheon at the University Club the first Tuesday of every month.

Fellow artists in the Institute freshman band may be amused to hear that your Secretary greased up his dusty horn and played first trombone in the Wesleyan University Band. It was undoubtedly this additional punch that won the "Little Three" football championship.

Bob Farrington writes: "Last February and March, Mrs. Farrington and I took an automobile trip through southern France and Spain. We did the usual things and saw the usual sights, and these countries have already been so thoroughly described in song and story that anything I might add would be entirely superfluous. We were towed by a yoke of oxen over a mountain pass through a couple of feet of snow, which probably gave us a thrill experienced by few on automobile trips either here or abroad." Otherwise, Bob says, things in real estate are quiet but it has been reported that he has been giving a series of lectures in the University Extension Course on "Real Estate Law" over Station WBZ.

Dr. Lewis is in the dumps over just having

## 1905 Continued

lost his right hand man in the Department, Professor Haslam, '11. It would seem as though Dr. Lewis were running a training school for research and development men in the oil industry. In the last few years five of his Faculty members have left him to go into this sort of work: two to Standard of Indiana; one to Tidewater; one to Standard of Louisiana; and now, Haslam, to Standard of New Jersey.

During the past year Dr. Lewis' Research Laboratory of Applied Chemistry has been working for the Standard of New Jersey, Humble, Phillips Petroleum and the Texas Company. One of his Faculty members is a consultant for the Universal Oil Products Company, another with the Cities Service, and a third with Kellogg. The Research Laboratory, which, by the way, is doing about \$150,000 worth of work a year on research for various companies, has lost seven directors and assistant directors in five years, all of whom went out into important positions in industrial research. Dr. Lewis wants us to tell him that he cannot be expected to run an organization with that sort of executive turnover, but he seems to take little consolation in the fact that the demand of industry for his men is in itself a compliment to the value of the Laboratory's work. — ROSWELL DAVIS, *Secretary*, Wes Station, Middletown, Conn. S. T. STRICKLAND, *Assistant Secretary*, 20 Newbury Street, Boston, Mass.

## '06

Last year Technology luncheons were held at the University Club, Boston, on Tuesday of each week. It has

been suggested that the classes designate a particular Tuesday each month when members of that class will make a special effort to attend. You are hereby notified that your Secretaries have designated the last Tuesday of each month for 1906. The luncheons are held from 12:30 to 2 P.M. and non-club members are welcome. It is earnestly requested that '06 men make a special effort to take in these luncheons the last Tuesday of each month as we are very anxious to have the Class make a good showing. Those of us around Boston realize how seldom we see each other. Let's make the most of the opportunity which these luncheons present.

This seems to be 1906's turn to take advantage of some of Ralph Patch's activities. In some issues of *The Review* we see items about Ralph in the 1905 notes and we wonder if he has gone back to his old love. Then we get a letter like the following and we conclude that he is big enough to divide between the two classes and become an asset to each. Here is 1906's portion for this month:

"On a recent trip I spent a week in Kansas City. Looking in the telephone book, I found Herman Henrici's telephone number, so gave him a ring. Herman was out but his good wife was sure Herman would want to see any '06 Technology men so invited me to come out to eat with them. Of course I accepted. When I arrived at the house, I found not only Herman but Al Hertz. We had a very pleasant evening together. Herman is the President of the Henrici, Lowry Engineering Company. As nearly as I could determine upon inquiry about the city, Herman holds quite an important place in the doings of Kansas City.

He has just finished his term as President of the Rotary Club and is at the present time President of the City Club. I asked every native whom I met if he knew Herman Henrici. Sure, they all knew him.

"Al Hertz is in the architectural firm of Van Brunt and Hertz. If you want to build a telephone building or any other kind of a building in Kansas City, Al can take care of the architectural features, while Herman handles the engineering part."

As a sequel to Ralph's letter, we present the following from "Patchwork," the house organ of the E. L. Patch Company of Boston. This was forwarded to Dennie by Herman Henrici: "We force a little publicity on RRP. Ordinarily we let President Ralph R. Patch play the autocrat around our place just as much as he pleases because we can't help having a liking for his particular brand of autocracy, especially when his kind of autocracy makes life rather pleasant for all of us and gets the bulkiest kind of results for the business. However, when he puts on an official frown and swears we may as well look for new jobs if we attempt to write him up in 'Patchwork,' all the Bolshevik molecules in our blood put on a genuine Red demonstration. Some of us, therefore, may not have any jobs after this number of 'Patchwork' reaches you, but we'll at least have the satisfaction of knowing that we can't be intimidated. Sometimes when we wish RRP gave less of his time to association work and more to the business, we find that thought forced to do battle with the fact that, since he became general manager, our business has tripled.

"It does beat all how a fellow can be President of the American Pharmaceutical Manufacturers' Association, Vice-President of the American Drug Manufacturers' Association, Lieutenant-Colonel of the Officers' Reserve Corps for medical procurement, moderator of the Town of Stoneham, member of the Stoneham Planning Board, member of nine different associations and clubs, and heaven knows what else. In addition to this, he's actually sung in the choir of the Stoneham Baptist Church for twenty-nine years and before that, when he was huskier, he pumped the organ.

"For purposes of our record, we may as well tell you that our hero was born in Stoneham on May 9, 1882; attended the Stoneham public schools and was graduated from the Massachusetts Institute of Technology; married Christine Vaughan Johnnott on September 4, 1907; and is the father of three children, Charlotte, Edgar and Alma, all of whom are now in the Stoneham High School.

"Just to get a little outside experience, he spent three years at engineering work — surveying, railroad, highway and water-works construction, and sewage purification. After he entered the employ of the E. L. Patch Company in September, 1906, he spent four years doing jobs of all sorts in the laboratory and then traveled for five years as salesman. That gave him both the inside and the outside viewpoints. After that he came back into the plant again as advertising manager, followed through as sales manager, Boston office manager, general manager, and since the death of his father, E. L. Patch, in 1924, has been President and Treasurer. . . ." — J. W. KIDDER, *Secretary*, 8 Harrison Avenue,

Boston, Mass. EDWARD B. ROWE, *Assistant Secretary*, 11 Cushing Road, Wellesley, Mass.

## '07

We are indebted to Professor Charles E. Locke, '96, for two interesting news items as follows:

The Class of 1907 missed Warren Hastings of Course III at the Reunion last June as he had been a regular attendant at previous reunions, but there was a good reason for his non-appearance. After having raved against matrimony and having sympathized with his poor unfortunate classmates who had succumbed to feminine wiles, he finally became bitten with the bug. The bite resulted in a most virulent attack which developed very rapidly and resulted in his marriage, the latter part of June, to Miss Alice Treloar of Franklin, N. J. Ever since graduation, practically, Hastings has been in the employ of the New Jersey Zinc Company and his job has been the development and management of the Sterling Mine of that company at Ogdensburg, near Franklin. In the course of years he had associated with many ladies but was apparently immune. However, when Miss Treloar, whom Hastings had seen grow up in Franklin, became dispensary nurse for the New Jersey Zinc Company and thus came more in contact with Hastings, he seemed to develop a sudden realization of her charm with the result mentioned above. The marriage was performed very quietly in a nearby town and the bride and groom departed just as quietly for a three-week honeymoon in Canada.

However, the news of the marriage became known and preparations were made for a proper reception to the bridal couple on their return, and according to all reports this reception was a wonderful affair. Both parties were so well known and Hastings' former views were so wide spread that it seems as if every one within a radius of twenty-five miles turned out. Hastings, being a councilman of the borough and a member of the Fire Department as well as an ex-chief, it seemed proper to first ride the pair around on the fire apparatus, which was done. This was followed by a celebration which lasted far into the night and possibly will never be forgotten by the bridal pair or by many of the attendants. Those who knew Hastings will find him to be a changed man. He seems more quiet and more subdued, showing the wonderful effect that matrimony has had upon him. He and his bride are living at Ogdensburg, N. J., where callers will be received with open arms.

Lawrence C. Hampton, who has been with the Union Oil Company of California as purchasing agent for a number of years, has been given a new job in an affiliated company organized under the laws of Australia and known as the Atlantic Union Oil Company of Australia, Ltd. He left Los Angeles with Mrs. Hampton for Sydney early in September, and his new office address will be 119 Phillips Street, Sydney, Australia. His official title is director and chief engineer which means a marked advance over his preceding job. His first work will be to open up bulk stations in Sydney and Melbourne in Australia, and Auckland and Wellington in New Zealand. This will be followed by expansion to other large cities and the starting of a refinery if business warrants. Hampton was



1907 Continued

back east last December and after his return to California he was engaged on an extensive job of standardization for the Union Oil Company and the American Petroleum Institute.

After working for Lackawanna Steel Company, Pennsylvania Railroad, Ferro Concrete Construction Company, and L. W. Hancock Company in various engineering capacities for several years, Everett R. Cowen has become Secretary and Treasurer of his own firm, Garst-Cowen Construction Company of Louisville, Ky., engineers and general contractors. With his wife and three sons, ranging from two to fourteen years in age, he lives at 1420 Goddard Avenue, Louisville.

We usually think of Paul Cummings and Stanley Wires together because they are President and Treasurer respectively of E. Stanley Wires Company, Inc., contractors for laying of roofing tiles, installation of interior tiles, and distribution of Toch Brothers, R. I. W. paints. Paul and Stan have worked together since 1915 and have built up a splendid business. Stanley says that since 1909, when he organized the firm, the volume of sales has increased from \$50,000 to about \$800,000 and the personnel from twelve to about eighty. The offices and display rooms of the firm at 120 Boylston Street, Boston, are most attractive and well worth a visit from any '07 man. Paul was not married until 1923 and has one daughter, while Stanley belongs to the "Five or More Club," having three daughters and two sons.

Another classmate to join the ranks of married men recently is Frederick G. Dempwolf, who became the husband of Miss Mary K. Stair on October 20, 1927. Fred has followed architecture consistently since 1907. He attended L'Ecole des Beaux Arts, Paris, from 1908 to 1911, and then until 1917 was designer with three different architects. He served as first lieutenant and later as captain in the aviation service during the war, and after May, 1919, was with his father as partner in architecture. Since his father's death in December, 1926, he has been in business for himself, with offices in the Cassatt Building, York, Penna.

We were sorry not to see Parker Dodge at the Twentieth Reunion. He was all signed up to come, but was kept away at the last minute. Parker has been a patent attorney, associated with the firm of Dodge and Sons of 724 Ninth Street, N. W., Washington, D. C., since January, 1909. He surely qualifies for membership in the same club with Stanley Wires, for he has six children — four boys and two girls, ranging in age from nineteen to one. During the war he served as first lieutenant, captain, and major in ordnance division and is now a major in the ordnance reserve. — BRYANT NICHOLS, *Secretary* 2 Rowe Street, Auburndale, Mass. HAROLD S. WILSON, *Assistant Secretary*, W. H. McElwain Company, Manchester, N. H.

'08

The first bi-monthly dinner of the 1927-28 season was held on Tuesday, November 15, at Walker Memorial. The following were present: Freethy, Longley, Carey, Hatch, Merrill, Cook, Bunney Ames, Steve Lyon, Heath, Appleton, Booth, Collins, Davis, Towle, Mayo, Sewall, and Carter. After dinner, Sewall very kindly gave a short

talk on the recently opened traffic tunnel under the Hudson River. The ventilating equipment for this tunnel was engineered by the B. F. Sturtevant Company so Sewall was able to bring out a great many interesting points in connection with the design and safe operation of the whole proposition.

Following Sewall's talk a general discussion was had regarding preliminary details of the Twentieth Reunion which will come next June. The Reunion will be held probably about June 17, and the majority of those present favored going back to West Bay Lodge at Osterville where we have already been taken care of so satisfactorily. The Reunion Committee will soon have more exact details settled and will send out definite information as soon as possible.

Sam Hatch's new address is 68 Barnard Avenue, Watertown, Mass. — W. E. Barton is now located at 405 Manning Boulevard, Albany, N. Y. — C. H. Spiehler has been located in Cincinnati now for some time with the Columbia Engineering and Management Corporation. His address is 314 West Fourth Street, Cincinnati, Ohio. — H. P. Gurney is living at 53 Strathmore Road, Brighton, Mass.

We are indebted to Professor Locke for information regarding A. H. Bradford. His permanent address is care of the Pacific American Fisheries, South Bellingham, Wash. During the winters he is at home at 1226 Warren Place, Seattle, Wash., and during the summers he is at Squaw Harbor, Unga Island, Alaska. The following excerpts from a letter from Bradford to Professor Locke will be of interest: "I am still very much in the land of the living despite my long silence, and actively engaged in the fish packing business. We can salmon here, five different varieties, and are making a success of it too. We have just finished our 1927 season with the largest pack of salmon in Alaska this year and that takes in a lot of territory. I believe there are over three hundred canneries devoted to salmon canning in Alaska today. We caught and canned approximately one and one-half million fish this year.

"Mining is at a standstill in this great unexplored mining country, potentially. The old time prospector is gone and we are coming to a realization that he was a very important cog in the machine of finding and developing mining prospects. There are only two copper mines producing in Alaska today, the Kennecott and the La Touche and only on a limited scale. They cannot get and hold the miners."

The following letter from C. O. Brown who served as Chairman of the Luncheon Committee in connection with the Annual Technology Convention last summer in New York will be of interest: "The fellows who attended the luncheon at the Technology Club are, Morrison, Bill Burch, Freedman, George Chobinger, Harry Spurr, Bremer, Harold Osborn, Norm Nicol and myself. Morrison, Freedman, Spurr and Bremer I had not seen since we left the Institute, and Morrison and Bremer have both put on considerable weight and look like 'pluts.' Spurr is even thinner than when at the Institute, which is some thin. You, of course, know how Bill Burch and Norm Nicol have survived the intervening years. We had an informal luncheon and talked about everything from airplanes to refrigerators, and broke up with a hazy idea

of having a monthly luncheon at the Club during the coming winter, yours truly being appointed the goat to get the fellows together. Of the men listed, as I recall it, all but Spurr and myself attended, or planned to attend the general banquet."

The next bi-monthly dinner will be held on Tuesday, January 10, at Walker Memorial. Usual notices will be sent. We hope there will be a large turnout as the Reunion Committee will have something to say. — H. L. CARTER, *Secretary*, 185 Franklin Street, Boston, Mass. LINCOLN MAYO, *Treasurer*, 842 Commonwealth Avenue, Boston, Mass.

'09

John Wiley and Sons, Inc. have just published the third edition of D. K. Bullens' "Steel and Its Heat Treatment," originally published in 1916. The new edition includes extensive changes, and the addition of considerable new material.

At the second annual conference of the Boston University Club, Department of Education and Vocation, held in Boston on November 16, John Mills presented a paper "Know Thyself" — a mutual requirement for employer and employee.

Mollie Scharff has been appointed chairman of the Investigating Committee of the Byllesby Company to determine the possible cause of the explosion of the five million cubic foot gas holder of the Equitable Gas Company at Pittsburgh on November 14. Associated with him on this committee is another Technology man, George E. Whitwell of the Class of 1915.

Mayo D. Hersey is chairman of the first sub-committee to be appointed by the A. S. M. E. Special Research Committee on "Cutting and Forming of Metals." Hersey is connected with the Bureau of Standards where the preliminary investigations of this sub-committee will be conducted. — CHARLES R. MAIN, *Secretary*, 201 Devonshire Street, Boston, Mass. PAUL M. WISWALL, *Assistant Secretary*, Franklin Baker Building, Hoboken, N. J. MAURICE R. SCHARFF, *Assistant Secretary*, 435 Sixth Avenue, Pittsburgh, Penna.

'10

No notes have been received by The Review Editors from the Secretaries of this Class for inclusion in the January issue. The Secretaries received the usual notification that copy was due, accompanied by such news as had been compiled in The Review Office. Members of the Class having news or inquiries should address them to DUDLEY CLAPP, *Secretary*, 16 Martin Street, Cambridge, Mass., or to R. O. FERNANDEZ, *Assistant Secretary*, 264 West Emerson Street, Melrose, Mass., or to KARL D. FERNSTROM, Room 1-181, M. I. T., Cambridge, Mass.

'11

As usual we had a good attendance at our annual eleventh day of the eleventh month get-together at Walker. In fact, by a strange coincidence there were twenty-two of us — eleven plus eleven. In addition there was one guest, Dr. Whitman of Northampton, a fraternity brother of Ted Van Tassel. The 1911 men present were: E. J. Batty, II; Johnny Bigelow, IV; Bog Bogdasarian, IV; O. H. Chase, IV; Obie

## 1911 Continued

Clark, II; George Cumings, VI; Dennie, VI; Tommy Haines, II; Ned Hall, II; Jack Herlihy, II; Hal Jenks, VI; Phil Kerr, II; Art Leary, XI; Harold Lord, II; Roger Loud, VI; M. L. Lowenberg, VI; Charlie McManus, I; Roy MacPherson, II; Fat Merrill, I; O. W. Stewart, I; Ted Van Tassel, X; and Emmons Whitcomb, X.

This was the first time for many years that we had seen Chase at a 1911 affair and it seems that he is now with Harold Field Kellogg, Boston architect. In the talk-around, Harold Lord said he had closed up his Wakefield plant and was now representing the owner on the new Batterymarch Building in Boston. Roy Mac said that he and his brother Jim, Dartmouth, '10, were expanding their small, phonograph records business and had recently taken over the Pathé and Cameo businesses. They now have five plants in operation.

Ted Van Tassel told us that his new no-filler method of insole and outsole construction is now being adopted by several high grade shoe factories, while it goes without saying that with Haines, Herlihy, and Loud present the Edison Company was painted in rosy terms. Roger Loud, by the way, is now doing some interesting pioneer work for that company in commercial heating and cooking.

As usual, we had some bowling matches afterwards and in the team match McManus's Mutts defeated Lowenberg's Loons, the high light of comedy being reached when Dennie rolled a 56 and then left to catch a train to Worcester. MacPherson rolled the second string for him.

Cal Eldred, VI, had hoped to attend the dinner but was unable at the last moment. He writes: "In addition to the routine maintenance and plant operation of the two mills of the Hollingsworth and Vose Company, we have just completed a 1,000 boiler horse power stoker-fired boiler plant at the West Groton mill. With Jackson and Moreland (page Phil Kerr) as consulting engineers, we are building a 1,000 boiler horse power pulverized coal boiler plant for the East Walpole mill which should be ready for operation the first of the year."

Carl Ell, XI, is certainly making good with a bang as Dean of Engineering and Vice-President of Northeastern University, and an article by him on "Coöperative Education" has recently appeared in *School and College*. At the Tenth Annual Banquet of the Northeastern Alumni Association in mid-November, Carl was given an honorary membership certificate. He recently made a public announcement that, effective in September, 1929, the present four-year courses in both the engineering and the business administration schools were to be abolished and the entire school put on a five-year plan.

In their consideration of an airport for the City of Baltimore the Municipal Airport Commission of that Maryland city picked a 1911-er, Ban Hill, I, to head the Committee on Airport Sites and superintend the writing of the report thereon. Nice work, Ban! Incidentally, the Baltimore *Post* in its "Day by Day" column recently said: "Bancroft Hill sitting on the front row . . . John Philip's brother . . . you'd never think it . . . little fellow, Bancroft . . . unobtrusive, care-

lessly dressed . . . clever . . . Tom Tingley, the people's counsel, will have to watch out when Bancroft gets on the witness stand . . . used to be city harbor engineer . . . now he's the United's valuation engineer . . . slick article."

Ed Woodward, VI, has taken up golf with a vengeance and sends in a snapshot to prove it, although he adds in the accompanying note from Chicago, "my 'form' here is marred by the fact that a foursome of ladies on the next tee prevented my following golf's fundamental rule." He says he and Jim Duffy, VI, play together frequently.

Well, classmates, don't forget that there is to be a Reunion of the Technology Clubs Associated at Atlantic City on May 25 and 26, 1928, because we want all 1911-ers possible to be there for a get-together of our own. And in the meantime, write to Dennie.

—ORVILLE B. DENISON, *Secretary*, Room 3-207, M. I. T., Cambridge, Mass. JOHN A. HERLIHY, *Assistant Secretary*, 588 Riverside Avenue, Medford, Mass.

**'12** Through the coöperation of some of our classmates connected with the telephone industry, we are able this month to dish out something a little more substantial than the usual verbal applesauce.

With the American Tel. & Tel. Co. in New York, and its subsidiaries, the New York and the New Jersey Companies, there are at present seven members of the Class of 1912 located in or near New York City. They have been induced to get up a little résumé of their activities and have given us exclusive publication rights.

When you pick up your telephone instrument to get your next door neighbor, or to make a business call a thousand miles away, there is little to remind you of the amazing organization and equipment that is involved. If something delays your call a few moments, you get as sore as a pet corn that somebody has stepped on. We know that we do, and our comments on the telephone people are often like firecrackers going off in a tin can. But the next time we feel that way, we're going to try to recall the fact that W. A. Rhodes, VI; L. W. Cooper, VI; J. C. Freeman, VI; J. A. Appelquest, VI; P. L. R. Flansburg, VI; H. H. Brackett, VI; and J. C. Hunsaker, XIII, are trying "every day in every way" to make the darn thing better and better.

For instance just mouth over the official title of this machine on which Rhodes has been working for several years. A dingus like this can't be built by any garage mechanic over-night. It calls itself, as the French would say, a "convertible-switch-type-straight-forward-call-indicator-annex—trunking-equipment-with-external-loud-speaker-busy-test-and-automatic-team-work." Just think of looking that thing in the face and telling it that it gave you the wrong number. Aside from helping to work up that bunch of static, Rhodes admits he is sometimes busy on the development of new trunking systems for handling calls from dial systems to manual central offices. Rhodes can be addressed in care of American Tel. & Tel. Company, 195 Broadway, New York, N. Y.

Now let's take up the case of Lester Cooper. His statement of what he is doing to earn the weekly meal ticket is about as plain to us as one of those old calculus problems would be if we met it suddenly this afternoon. He classes it all under the general heading of "development and research work on local central office circuits." Then he hops off on details of trunk circuits between dial and manual office subscribers, call indicator trunks, and special trunks between Bell System offices and the various types of offices employed by non-associate companies. Cooper's address is the same as Rhodes.

(You may think that because Rhodes and Cooper are such highbrows in this technical engineering stuff, that they're up in the clouds like professors or grand opera stars. Let us assure you that they can still play a mean game of poker, stud, spit-in-the-ocean, or straight Jackpots, as we know to our sorrow.)

Here's one that we can understand a little better. J. C. Freeman, among other things, has recently been involved in a special cable circuit to take television signals from Washington to New York. When the newspapers headlined the opening of direct telephone communication between Washington and Mexico City, some of the handiwork of this young man was behind the scenes. Freeman is cable transmission engineer with the Long Lines Department of the American Tel. & Tel. Co., 15 Dey Street, New York.

Let us now tune in on another station. Why, here's old J. A. Appelquest himself with the New York Telephone Company on valuation work. He studies the service life of various items of equipment, figures salvage values and thus determines proper rates of depreciation for use among other things in fixing rates. Appy must be the guy we can hang it on for some of those rate increases the phone company has been putting over. Appy has recently had his wrist fractured in an automobile accident, and as it happens to be his card-playing wrist we have no data on his standing as a poker player. Address Appelquest at his home, Highwood Avenue, Leonia, N. J.

When we come to Percy-with-the-initials-Flansburg, we have another man who's mixed up with this dial system business, but he is evidently not as much mixed up on it as we are, for we hear he's quite successful in his own particular line, which is estimating systems for dial system offices. It seems he has been with the Western Electric Company, but was recently "borrowed" if not stolen by the New York Telephone Company, on account of his proficiency in this particular work. We are glad to learn that Flansburg's wife, who has long been an invalid, is reported to be improving. Flansburg's address is Newark-Pompton Turnpike, Pompton Lakes, N. J.

Jerome C. Hunsaker, formerly chief of the aeronautical design section of the U. S. Navy, has been with the Bell Telephone Laboratories for about a year. He is working in the apparatus design section on the matter of establishing a wire service along commercial airways and a radio service connecting this wire network with aeroplanes by radio from landing fields along the routes. This is all anticipating the expansion of commercial



1912 Continued

aviation. The communication system thus worked out will be used for dispatching planes and furnishing weather reports to aviators. Hunsaker's address is in care of the Bell Laboratories, 463 West Street, New York.

H. H. Brackett, who is with the New Jersey Bell Telephone Company, seems to have a bad case of excessive modesty, for we couldn't get any direct statement of his work from him. From others we learn, however, that Brackett has a job as the transmission engineer of this company, a most responsible and important post. His home address is Summit Avenue, Oradell, N. J.

Leaving the telephone companies in these evidently competent hands, we pass to a few other notes of interest concerning classmates, before signing off.

A postcard dated August 8 finally reached us from Singapore, telling us that Eddie Holbrook, I, had had enough of the States the past year or so, and had answered the call of the Orient. We never could quite understand the significance of the famous "Back to Mandalay" song, but we guess Eddie must have it. The address he gave was Raffles Hotel, Singapore.

C. L. Gabriel, X, writes: "Your card of October 31 just received. I am marooned in Indiana. I now have charge of Development in our Terre Haute plant—as a result it's hard to find a business excuse for coming East very often. I surely would like to be with the gang tomorrow." Gabe is with the Commercial Solvents Corporation, Terre Haute, Ind.—Randall Cremer, I, has recently been made Vice-President of the Frederick Snare Corporation of New York. We expect to be able to tell you more of him and his job in the next issue.

From Professor Locke of the Mining Department we learn that Paul M. Tyler, III, spent the past summer in a study of the manganese situation for the U. S. Tariff Commission. After a preliminary visit to some of the eastern cities to study the import situation, he started west to Minneapolis to obtain information on the possibilities of manganese extraction from Lake Superior iron ores. From Minneapolis he went on to Duluth and on up among the iron mines. His next stop was in Montana where he looked over the manganese possibilities at Butte and Philipsburg. He took advantage of the Olympic Mountains to do some genuine alpine stuff. Short stops were made in Los Angeles and San Francisco where he learned that he had just missed seeing Triplett, III, who had passed through only a week or so previous. At Bisbee, Ariz., and at Deming and Silver City, N. Mex., he looked into manganese deposits. At El Paso he learned that he was again a few days behind Triplett who had returned to Mexico. The manganese mines around Batesville, Ark., were visited next and from there he proceeded to Cartersville, Ga. On his way north he included a number of the manganese deposits in Virginia. He came back to Washington fully charged with statistics and knowledge of the whole manganese situation.—FREDERICK J. SHEPARD, JR., *Secretary*, 125 Walnut Street, Watertown, Mass. D. J. McGRATH, *Assistant Secretary*, McGraw-Hill Company, 10th Avenue and 36th Street, New York, N. Y.

**'13** No notes have been received by The Review Editors from the Secretaries of this Class for inclusion in the January issue. The Secretaries received the usual notification that copy was due, accompanied by such news as had been compiled in The Review Office. Members of the Class having news or inquiries should address them to HARRY D. PECK, *Secretary*, 1123 Hospital Trust Building, Providence, R. I., or to G. P. CAPEN, *Assistant Secretary*, 25 Beaumont Street, Canton, Mass.

**'14** Jimmy Judge in Holyoke, Mass., is heaving sighs of relief that he and his factory were so fortunate in escaping the flood that was so disastrous to western New England early in November. Jimmy has written such an interesting account of conditions at Holyoke that part of his letter is being included in these notes.

"Aside from the thought of the terrible possibilities in case the dam should give way, watching the dam was better than any movie show. In eighteen hours the crest of the dam rose from less than two feet to just under fifteen feet. As the dam is just over one thousand feet long, you can imagine what a fifteen-foot crest looked like, spilling over the top. Barns, camps and telegraph poles sailed over. Any structure that went over was promptly and efficiently converted into kindling wood. Sides and floors of barns made good rafts until transformed into toothpicks. The most common passengers scurrying around on these rafts were rats. One contained a pig, another a dog, but all met with disaster when going over the falls.

"The first I realized of the seriousness of the situation was on Saturday, the fifth, when the mills were asked to send home any employees living in South Hadley, as the bridges were to be closed. At that time the water was within three feet of the bridge floor beams. The railroad track had already been covered by several feet of water. Freight cars were floating off into the river: The gas works lost tons of coke, and was completely flooded. In order to prevent an explosion, over a million feet of gas a day had to be burned at the works. For a long period gas was shut off from the Springdale section, because so many meters had been torn loose in flooded cellars. The road to the gas house was washed out, and the principal gas main was suspended several feet in the air.

"The greater part of the houses below South Street were flooded, and water rushed down a part of Sargent Street, which, you will recall, is one of our principal streets leading down to Main Street. This flooding was due to the overflowing of the first canal. Fortunately, the water got back into the second canal, and did very little serious damage.

"At no time was the dam itself in any real danger of going out. If you will remember the Holyoke test that we had to write up in fourth year Hydraulics, you will recall that the dam is anchored to the bed rock in a wide, deep channel blasted out of the rock itself. It is built of concrete, with a granite block face. Just to prove that all of this information has not been forgotten, I will remind you that the down stream side of the

dam is section of a parabola for the lower half and a cycloid for the upper half, with a long flat space at the bottom for the water to pound on. All stone blocks are anchored to the concrete with heavy iron blocks.

"The abutments stand about thirteen feet above the dam, and at the height of the flood, water was running nearly two feet over these abutments. Great quantities of sandbags and trap rock in bags, as well as loose stones, were thrown around the abutments to protect them. Water came up through the floor of the gate house and ran out the windows. As this building is of brick, there was considerable fear expressed as to whether or not it would stand. Considerable additional bracing was given to the building, and fortunately, it stayed in place. Had it gone out, it would have made an opening about one hundred and twenty-five feet by five feet deep. This would have been exceedingly serious.

"Everything is now normal, except for the work that is going on to repair the damage. These include a long concrete wall to protect the new railroad tracks. I will not bother with any more details now, but will save them up for the next 1914 dinner, when, under proper conditions, I will proceed to talk about the horrors of water."

The Boston meetings of the Class started off with a real bang and lots of enthusiasm. The first luncheon was held on November 8 at the Engineers Club and, in honor of the reelection of Porter Adams as President of the National Aeronautic Association, aviation was the subject of discussion. Porter came on from Washington, and gave an exceedingly interesting and entertaining talk on the significance of the trans-Atlantic and Hawaiian flights. Twenty-two Fourteeners and guests were present. Walter G. Hauser of Waterbury, Conn., and Paul H. Taylor were initiated as newcomers to the Boston luncheon meetings. Taylor had not been seen at Fourteen meetings for several years, and his re-appearance was greatly welcomed. He looked more prosperous than ever, if such is possible, and modestly admitted that he was one of the executives of the Mason Hamlin Piano Company of Boston. Hauser has been a regular attendant at the reunion dinners, but this was his first pilgrimage up from Connecticut to attend a luncheon.

H. V. Fay, who has been somewhat of a globe trotter during the past ten years, has returned to Washington, where he is temporarily engaged in finishing up some work on post-war commercial policies in Europe for the Harvard Bureau of International Research. Incidentally, Fay has already attracted attention for his writings on economic subjects.

Two of our number presented papers on aeronautical subjects at a session of the Society of Automotive Engineers recently held in New York City. They were Dinny Chatfield, who contrasted the monoplane and biplane in the light of recent airplane design, and Commander Weyerbacher, who discussed details of metal construction for planes. Weyerbacher, who came to Technology as a Naval Academy graduate, and who will be remembered particularly by Course VI men, is now at the Naval Aircraft Factory. He is known as one of the Navy's best authorities on aircraft design. [See Trend of Affairs. Section in the December Review.]

1914 Continued

We have two additions to the junior league to report. Frank Ahern reports the arrival on July 4 of Richard Donald, and Ross Dickson is extending his already expansive smile because of the arrival of Nancy Jean on October 19. — H. B. RICHMOND, *Secretary*, 100 Gray Street, Arlington, Mass. G. K. PERLEY, *Assistant Secretary*, 21 Vista Way, Port Washington, Long Island, N. Y.

**'15** A good time was had by all. Among those present were Herb Swift, Louis Young, Archie Morrison, Charlie Norton, Max Woythaler, Abe Hamburg, H. W. Brown, N. S. Clink, Loring Hayward, Clive Lacy, George Rooney, Frank Foley, Jack Dalton, and myself. These fourteen are practically the same reliable fellows who attend every meeting and support our Class. This, however, was four more than at our last meeting two years ago. What is the matter that we don't get more fellows to come out? We are planning another meeting on Saturday, January 7, at the time of the annual alumni dinner, and the details of this will be sent you later.

The pledge cards for the dormitory fund continue to come in — but slowly. It is, of course, impossible for me to answer every one personally, but here and now I want to thank each one who has so far sent in a donation and commend him for his generosity and support. To the others I send an urgent appeal to let me have their cards and pledges as soon as possible. We want our Class to make a good showing.

Denison's office sent cards to all our Class within a fifty-mile radius of Boston. About fifteen of the fellows replied that they could not come, so altogether we had a pretty fair return of answers. We had an enjoyable dinner at the University Club, Boston, and we talked of many things. The association of class friends should become closer as we grow older, and I hope the fellows will come out stronger at our next get-together. We talked of Ted Johnson's recent serious illness, of Gabe Hilton's recent visit to Boston, traffic lights, automobile tires, the success of various members of the Class, and touched on a brand new subject never before discussed by any group of men, namely, the new Ford car.

The boys continue to support my efforts nobly and I am glad to give you the following interesting letters which came in this month. In our regular column of weddings the following reports another good engineer who has taken the plunge: "William Robert Tayler, II, was married October 15 to Violetta Klavin at Riga, Latvia. The local register was signed by McCeney Werlich, '15, American Consul, who writes that they are now on a honeymoon over Finland and Scandanavia. Tayler has been the European Technical Advisor for the United States Machinery Company of New York, which organization makes veneer, saw-mill and wood-cutting machinery."

I am sorry to tell you that our good friend, Howard Thomas, has been somewhat under the weather, and is ordered to East Wolfeboro, N. H., for his health. The following letter is typical of him. "It looks as if I were going to have the same tough luck about attending the class dinner as I had last year, as I am up here on a protracted vacation, by the doctor's orders, and expect to be here until Thanks-

giving. I am awfully sorry I cannot be there and see the gang, but I guess it is out of the question. Better luck on the next one. I am enclosing a letter appointing you Class Treasurer, as you requested, but I think it ought to come from Frank, as he was Secretary at the meeting at which you were elected last year. I personally have no right to make you Treasurer. Frank held the official office of Secretary and your election should show in the records he has, and he has power, or had the power, to give you notice of your election. Anyway, here's the letter, and use it if you want to. Don't let Henry Sheils and George Rooney sit together at the dinner, because if they do, nobody near them will get anything to eat. That happened to me the last time we went to a dinner together at the City Club. Be sure and give my best wishes to the bunch, and tell them I'm damn sorry I'm not there."

When the boys write in from such widely different points as the two following letters represent, I feel gratified that they are taking a lot of interest in our monthly column. The following is a splendid letter from Joe Livermore. "Several years have passed since I have written the Class Secretary, although I did take in the 1925 Ten-Year Reunion. I don't believe the 1915 column of class news has ever been so interesting and as long as in the current issue. I will try to swell the volume for the next month, but my long silence has been based on lack of interesting facts concerning yours truly. This month begins my tenth year with Lockwood, Greene and Company, Inc. Two years ago I forsook the Chicago office and moved to Charlotte and do not regret the change. We are in the center of the rapidly developing Piedmont Region and are having our share of the engineering and architectural work. My own efforts are about evenly divided between developing prospects into clients, and in supervising the building of various plants and turning them over ready for use. About six months ago, I built a home at the above address and feel more settled than at any time since leaving the Institute. Our boy, Dick, is almost six and is patiently waiting until his new sister, June (now five months old) is big enough to play with him. Within a day or so we expect to start our delayed vacation and drive down to Miami and back. Best wishes, Azel, and regards to any of the '15-ers you may see."

Despite the drive to get notes from you fellows and the scriverings and scribbles that go to prepare them there is a great deal of pleasure in this job. An example was my recent meeting with Douglas McMurtrie, X, in the station at Albany. Douglas was on his way to Chicago. As you may know, he is in the research department of Brown Company's mill at Berlin, N. H., and recently has been busy outside the plant on technical work with the sales department at the different branch offices. However, you may not know that Douglas married a Parisienne while he was in France with the army and now has three fine looking sons. He was in France about six weeks last summer with the Legion. He entranced me with his vivid accounts of the real places of interest in Paris and of the history of the customs, people, and old places in the country. He has had an enjoyable trip over there.

Here's a real knock-out from Arthur Ball out on the coast. Our men are widely scat-

tered, and here's one prominent in the well-known movie business. "Allen Abrams and yourself gave me and my work quite a boost in the class notes in the November number of The Review, which is just at hand, for which I thank you both. I was somewhat embarrassed to note the reference to Fairbanks' next picture. When I wrote to Allen Abrams some months ago in reply to his letter, we were doing preliminary work with Fairbanks for a production based on the Crusades which he was then planning to make entirely in color. Later Fairbanks changed his mind regarding the story and decided to make a picture of the more usual type and decided not to make this new one in color; so that Allen Abrams' kind reference to Fairbanks' next picture will not pan out in this case. Some smaller examples of our most recent work may be seen in the 'King of Kings' and we are now making some productions of our own. Perhaps this episode can be made to yield a formula whereby you can get responses from individuals at will. Publish some remark or rumor regarding them which will cause them to write to you giving you the straight dope. I would suggest that you try this method on Weare Howlett, regarding whom I have not heard for a long time. However, judging by the volume of notes in the November number, such a procedure is far from necessary. Congratulations on your good work." I think his last paragraph is excellent. I hope that stirs you up so that you all will write in and tell me that I am wrong.

I saw Casselman some time ago in Pittsburgh. Here's a fine note from him which he sent with his pledge card, which proves him to be one of our most regular fellows. I hope a lot more follow his example. "Would have replied to your letter before, but I have been under a good deal of business pressure and in addition have been traveling back and forth to my home on account of illness in my family. I am enclosing the pledge card. I appreciate your compliment about being one of the more successful men in the Class, and if just being able to keep one's head above the water is being successful, then you are right. I am not one of the more fortunate ones who have money to spare, and who can carelessly make out a budget with an item for saving of \$500 a year or more. Under these conditions the amount I have pledged is the most I can do at present. I am glad to do this much and want to help all I can. It is good to see the response that you are getting from classmates in writing for The Review. I hope you have as good and better luck in getting funds."

Because of the conflicts of dates I must have overlooked our Christmas number. Anyway, in this January issue I hope you all have had a happy Christmas and will begin a bright and successful 1928. — AZEL W. MACK, *Secretary*, 377 Marlboro Street, Boston, Mass.

**'16** Bill Farthing writes as follows: "I have seen the 'No Notes Received' sign so long that I am embarrassed every time The Review comes in. Jimmie Evans, Bill Kniesner and I had lunch together a few days ago, and drafted a form letter to go to every member of the Class, and surely from the responses to that letter we will get enough dope to fill at least one column of The Review."



1916 Continued

I am surprised we haven't heard something from the Boston crowd, especially since such startling things have happened there, as Knightie Owen's wedding, of which no notice has been given. Pending the flood of replies that I am certain we will get from the form letter I have gathered together a few items about the '16 men hereabouts.

James Archer Burbank is now Vice-President and Director of the John W. Ferguson Company of engineers and builders. Jack lives in Scarsdale and is the father of some children. He failed to tell me how many. Jack has been doing some very commendable work with the New York Committee for the Technology Regional Scholarship. The Committee awarded the Scholarship this year to a boy from Ridgewood, N. J., and is raising funds to assist two other worthy boys from New York. In Jack's drive to raise funds he paid some of us a rather subtle compliment.

Dick Ahearn is now with James Stewart and Company of New York. Dick recently moved to White Plains. — Steve Brophy is sitting on top of something in the Anaconda Copper Mining Company — I think the Anaconda Sales Department. Steve lives in Scarsdale and in Squirrel Island, Maine. He has two daughters, the latest arrival, Cynthia, is now about a year old. — Walt Binger was recently made Vice-President of the R. H. Howes Construction Company. Ralph H. Howes is also an Institute man, '03, and is at present handling some extensive jobs around New York. Walt also is still President of the Thompson-Binger Company, which specializes in concrete construction. He spends about half his time in Greenfield Hill, Conn., and the other half in Manhattan. He has the distinction of owning a private residence in New York City. Walt is the proud father of two daughters: Charlotte Hunnewell and Frances Sorchan; also one blue ribbon Irish Setter, Tyrone Terry.

Bill Kniesner promised to tell us something about himself, but it seems he is too modest. Bill is now associated with Robert S. Blair, Patent Attorney. He did, however, send in the following information about Joseph Meigs: "One of the boys reports running into Joseph V. Meigs, V, here in New York. Meigs modestly confessed that he spent several years on the faculty of Boston College, achieving the grade of Professor of Organic Chemistry. It seems also that he took a Master's Degree. Since leaving Boston College, Meigs did considerable work in the field of oil cracking, and is co-author of a treatise on this subject. He has made several inventions in the field of chemical products and processes, and in fact his work in this direction has been of such a character that he has been able to interest substantial capital in some of his developments. Meigs is married and his address is 8 Bergen Avenue, Jersey City."

Charlie McCarthy sent the following concerning himself: "For the past year and a half I have been connected with the engineering department of the Chance Vought Corporation of Long Island City, N. Y., 'Builders of Dependable Aircraft' as an advertising man phrases it. The company has long specialized in the design and construction of two seater observation-fighter airplanes for the Navy. They are equipped with wheels for landing on the deck of an aircraft carrier but

may be quickly converted into seaplanes by substituting floats for the wheel landing gear, and may then be used on the catapults of battleships and cruisers. We modestly admit that our latest model, which we have now in the course of production, is at the head of its class.

"Prior to joining the Vought Corporation, I was a member of the Construction Corps of the Navy on Aviation Duty, in the course of which I occupied for some time a desk in the 'Halls of the Mighty' in Washington, and more formally known as the Bureau of Aeronautics. Here it was my job to examine the planes and give analyses of new aircraft under construction for the Navy Department and pass on their structural soundness. I was responsible for the issue of not a few rules and specifications for the guidance of airplane builders. Now, at last, I find myself on the other side of the fence, the productive instead of the critical side, and have to work to the rules myself. This situation is not without its humorous touches when I have occasion to suggest to my successor in Washington that a slight modification in some rule or other would be an improvement.

"As to my state of life, I will say that I am in good health and still a bachelor. I'll leave it to you married men to say whether I should add 'thank goodness' or 'more's the pity.'"

Thomas Steele Holden was Professor Holden at Texas University, and taught me calculus when I attended the Long Horn Institution. Tom first went to the Institute as instructor in mathematics, and while there decided to study architecture, and finished with our Class. After graduation he followed this as a profession for two years until entering the World War, where he served in the Division of Public Works and Construction of the Department of Labor. He contributed much of the material for the Departmental Publication on Economics of the Construction Industry, recognized as the most authentic study on this subject. In 1919 he entered the employ of the F. W. Dodge Corporation, the publishers of the *Architectural Record*, *American Contractor*, *Sweet's Architecture Catalogue* and *Sweet's Engineering Catalogue*, *Real Estate Record* and *Builders Guide*, and the *Graphic Review* (not a tabloid). Tom's work has largely been that of compilation and dissemination of construction statistics, and his figures are used by many publications in this country and are cabled regularly to England, Sweden, and Japan. In 1926 he was made Vice-President of the F. W. Dodge Corporation, in charge of the Statistical Division. Tom married Ann Stratton, who composed songs used by such artists as Anna Case, May Peterson, Paul Althouse and Jerome Swinford. The Holdens live at Darien, Conn., in a farm house built in 1786, and known as "Old Homestead." — RUSSELL H. WHITE, *Secretary*, Kardex-Rand Sales Corporation, 118 Federal Street, Boston, Mass. CHARLES W. LOOMIS, *Assistant Secretary*, 7338 Woodward Avenue, Detroit, Mich.

'17

The members of the Class will probably have noticed on page 86 of The December Review that Clair E. Turner, Associate Professor in the Department of Biology and Public Health, was elected to the

chairmanship of the Health Section of the World Federation of Education Associations.

Over in San Francisco, another 1917 professor, Alfred S. Niles, Professor of Aeronautical Engineering at Leland Stanford University, was the speaker at the September meeting of the San Francisco section of the A. S. M. E. His topic was the "Development of New Types of Airplanes and Their Accessories," and was a complete description of the work done by the Army Air Service at McCook and Wright Fields near Dayton, Ohio. He closed his address by touching briefly on the new developments which are now being carried on, and he also gave an outline of the manner in which the government funds appropriated for this work are actually expended. This meeting was held at the new headquarters of the San Francisco Engineers Club.

Francis V. duPont has been reported as actively interested in aviation, and more particularly in the establishment of an aeroplane plant at Wilmington under the supervision of G. M. Bellanca. To some extent the published announcements were apparently news to him; however, they serve to remind us of a serious omission from earlier notes: Phoebe Lyman duPont arrived on June 14. — John DeBell says his family census shows three youngsters now, but gives no further data. — James Cronin's advent on October 14 was heralded by proud Papa John with a beautifully designed card similar to the one that once adorned these columns. Anybody else?

Edwin Woodward wrote in on the letterhead of The F. and R. Lazarus and Company, Columbus, Ohio, just in time to make this issue: "I just wanted to give you my change of address in case there should be any 1917 notices. Last summer I left my position in Xenia, Ohio, with a cordage manufacturer and accepted a position as workroom superintendent with the above concern, which is the largest and finest department store in Ohio. I supervise the activities of thirteen workrooms scattered throughout the store which will alter or repair anything from a room full of furniture to milady's stocking.

A. P. Dunham is as busy as the famous cat now that Postum and Walter Baker's cocoa are mixed in the same cup. Postum has also taken over a coffee company. The class funds are no longer low; they have ceased to exist, and Brick will soon send out a request for contributions or dues. It is your privilege to anticipate that letter, writing him in care of Walter Baker and Company, Dorchester. — John Holton is now in charge of research for the York Heating and Ventilating Company of York, Penna. — "Monty Lovejoy went duck hunting and shot a fox." That is exactly as the news was reported. It's the weird wild life of the Henniker dune country.

Happy New Year! — RAYMOND S. STEVENS, *Secretary*, 30 Charles River Road, Cambridge, Mass.

'18

Apparently the 1918 crowd does not want notes in The Review every month, and yet they are crabbing when they do not have news of their classmates. The Secretary cannot make news of whole cloth and get away with it to your satisfaction.

I have asked for news and yet not a thing

1918 Continued

has come in for the last two months. I did have a note from Shorty Carr within a few days but that was in answer to a letter from me. News that he gave me was to the effect that he and Mrs. Carr had seen Grenny Hancock and his wife a couple of times lately, and that they had tried to get hold of Earl Collins but without success. Earl must be burying himself if he cannot be found. Earl, where are you? Please step to the front and explain yourself.

Two of our classmates are helping to lead Technology clubs throughout the country but they seem to be ashamed to let us know of it. The Technology Club of Central Ohio, at Columbus, has as its President our old friend, C. E. Richards, and the Technology Club of St. Louis has as its Secretary-Treasurer our classmate, Lloyd B. Van da Linda. There ought to be a greeting for every 1918 man in those two cities if nowhere else.

I suppose your Secretary has a confession to make in this same line but has neglected to let you know. For the past two years the presidency of the M. I. T. Womans' Association has been in my hands and it will be there again for the next period of two years also.

As the Tenth Reunion is approaching we we have a number of things to think about. Any of the fellows who are to be in or around Boston on January 7 should plan to be on hand at the Alumni Dinner and bring with them any suggestions they may have in the back, or even the front, of their minds. We are always open to suggestions. Perhaps we can even plan for a meeting of the Class separately before the dinner so that we could talk things over other than at the dinner table.

Now, who has the Class Baby? I don't think this child has been found for the Class of 1918. This means who has the child born earliest after we finished school in June, 1918. This does not hold for fellows married while they were in school but for those married after June, 1918. Alan Sanger has a young daughter born December, 1919. Can anyone get ahead of that? News to this effect would be greatly appreciated so that we will know definitely whose child holds that honor before we have our Reunion in June. Just drop me a line giving me the name and date of birth of the child or children.

News of classmates of any kind is greatly appreciated and just write a post card if nothing else to me. Why not try to plan on sending some news regularly, say once in two months, at least? — GRETCHEN A. PALMER, Secretary, 148 State Street, Boston, Mass.

'19

No notes have been received by The Review Editors from the Secretary of this Class for inclusion in the January issue. The Secretary received the usual notification that copy was due, accompanied by such news as had been compiled in The Review Office. Members of the Class having news or inquiries should address them to PAUL F. SWASEY, Secretary, at 99 Washington Street, Boston, Mass.

'20

A welcome note from Larry Winant contains the good news of his engagement to Miss Helen Pingry of Millbrook, N. Y. Larry is now with the Krebs Pigment and Chemical Company of New-

port, Del., in the engineering department. Previous to this he helped to build the new Mid-Hudson Bridge at Poughkeepsie, as assistant engineer with the consulting engineering firm of Modjeska and Moran. 1920 wishes you all happiness and success, Larry.

No doubt many of you have read of the sad and untimely death of our classmate, Addis Nelson, who left us in his second year to enter the Naval Academy. After graduating from there in 1921 he served on the U. S. Cruiser *Concord*, the battleship *Florida* and other ships and was later with the destroyer squadron which convoyed the world fliers. A little more than two years ago he was transferred to the Flying Corps of the Navy and stationed at Pensacola. While there he married Miss Bessie Turner of that town. About a year ago Lieutenant Nelson was transferred to Norfolk, Va., to organize a scout squadron. On November 7 he was flying a Curtiss Hawk plane when his craft collided with a Martin bomber from Langley Field and crashed into the water near the Norfolk Country Club. The three occupants of the army plane jumped and were saved by their parachutes, but Nelson could not get clear and went down with his ship.

I don't seem to run across many 1920 men in my travels but did have the good luck to run into John Lyons not long ago. He is still doing construction work and boasts two fine little daughters. He told me that Herb Dorr was with a construction firm here in Boston also. I had another all too brief visit with Buck Clark and his news is that he has moved to Springfield and has taken up his abode at the Oaks Hotel of that city. Buck is still with Flintkote. — HAROLD BUGBEE, Secretary, 9 Chandler Road, West Medford, Mass.

'21

We regret having received word that Charles Lane Poor, Jr., XV, died a short time ago at the Peter Bent Brigham Hospital, Boston. Poor was an industrial engineer with the National City Company of New York, having received his training at Harvard with the Class of 1918, and at Technology. Our deepest sympathies are extended to his wife and two boys.

The following news may be a little passé, but we have it and will take a chance. Charles Barton, Jr., X, says: "Whether the news from me is old or new, I cannot say. In November, 1925, I left Brunswick, Maine, where I was with the Pejepsco Paper Company, and headed due west, stopping off here at Plainwell, Mich., with the Michigan Paper Company as chemist. 'Chemist' in most paper mills, as you know, is decidedly a misnomer; the title might far better be 'Jack of all Trades.' Since I am still in the same field as the one which I started, you may see that the work has been most interesting, and the variety of the work probably has much to do with it."

Walter R. Vitalini, II, 151 East Main Street, Milford, says: "I am now dieting on the various brands of coal dust (hard or soft) produced for distribution by others and sundry like myself who don't know how to wear white collars with any degree of success. In short, I am in the coal business, with the old captain himself and my brother. I have been at it now for more than a year and it has not bored me with its monotony as might

be expected. I have to do every conceivable sort of work, as I have the dignified title of mechanical overseer (oil man and repair man). The hardest part of my work is trying to educate the rest of us to use the mechanical equipment as such.

"As for classmates, believe me or not, Friend Hysom, '19, breezed through my town last summer and spotted me on my truck just after I had finished dropping a load of soft coal. He penetrated my disguise pretty easily, I thought, but I rather think it was because of the name on the truck."

Edouard N. Dubé, I, Northampton Street Railway Company, Northampton, wrote: "There has been little new and even less interesting happening out my way in the past few years. My job here consists of looking after the maintenance of about forty miles of track, the reconstruction of a very little bit here and there with once and a while a scrap of real engineering work thrown in as a teaser. We have a bridge here that is nearly a quarter of a mile long, one of whose spans is about three hundred feet long. One of the piers supporting this span had been getting lazy for some time, but last summer it started to settle in earnest. By the last of September one side of this pier was down about fourteen inches and going strong. Work was started immediately and a new and better foundation was completed January 17. By this time the pier was nearly twenty-four inches out of level and nine out of alignment. Part of my duties consisted in checking up on these measurements every day. It is interesting to note that the improvements were designed by E. D. Pettee, '92, of J. R. Worcester and Company. The foundation conditions are particularly difficult and aggravated due to changing river currents. As for myself, I have to announce the arrival, on December 4, 1926, of Therese Lucienne. Further remarks are unnecessary."

J. H. McEvoy, Jr., XV, is with the McEvoy Screen Pipe Company, 2428 East 56th Street, Los Angeles, Calif. — George A. Kain, Jr., VI, advised that he works for the Kingsley Miller Company, 625 West Jackson Boulevard, Chicago, Ill. — Vladimir Dixon, II, 2F Avenue de l'Opera, Paris, France, writes: "I am still alive and that, I think, is all that would interest you for the moment."

Thomas W. Proctor, I, says, "I am at present working for M. C. Tuttle Company of Boston as job engineer, in charge of layout, and so on, on a building for the Scranton Lace Company in Scranton, Penna. Previous to that I have worked for this company on two other building jobs in Scranton and Orange, Mass. Before that, I worked for the Montana Power Company on a hydro-electric job in the Beartooth Mountains, Mont., for a year and a half. I have also worked in the Maine Central Railroad engineering department, on a dam at Salem, N. H., for a subcontractor double tracking the Missouri Pacific Railroad near Jefferson City, Mo., and a crushed stone quarry in Northern Texas.

"I have run into a few Technology boys in my travels around. Not long ago I ran into Robbins, '22, here in Scranton, and spent a pleasant evening with him. He is an engineer for the New Haven. Andrews, VI, '25, rooms here in the same building with me. Carl Morss, XV, I see occasionally. He is



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working for the Wright Aeronautical Corporation in Paterson, N. J."

Robert R. Worsencroft, I, Engineering Building, University of Wisconsin, Madison, Wis., wrote some time ago: "For the past four years, I have been teaching the younger generation how to draw lines, here at this university. The years have passed rather uneventfully, which is to say that I am still single, and so, naturally enough, have not accumulated a family. However, I still have hopes that my bachelor state will not last forever; and you may interpret that statement as you please. As to other '21-ers, there is one here with me, J. W. McNaul, II, who has been here just as long as I have and is just as pedagogical. He is teaching machine design."

M. H. Winchester, II, Stone and Webster, Inc., 147 Milk Street, Boston, about a year ago wrote: "After having experienced the trials and tribulations of the domestic oil burner business for a year and a half with the Socony Burner Corporation, I am now back in the engineering game. I have been connected with Stone and Webster, Inc., as a mechanical designer since June, 1926. This is my third voyage on this particular ship and I trust it is permanent. They say the third time never fails. I have been married since November, 1921, and have two little girls. The older is four years old and the younger four months. These two are the pride of my life, and I will venture to state as fine a pair of kids as ever happened."

Your Secretary wishes you all a happy and prosperous New Year and hopes to receive at least one letter from each member of 1921 during the new year.—R. A. St. LAURENT, *Secretary*, 431 Oliver Street, Whiting, Ind. CAROLE A. CLARKE, *Assistant Secretary*, Research Department, Victor Talking Machine Company, Camden, N. J.

# '22

No one need be afraid, this time, of any lengthy or verbose introductions. We have nothing to be either about.

Deeply though we regretted to see the November issue of *The Review* go by with no Secretarial word from 1922, we hoped at least that it would bring a few elaborate razzes down upon the Secretarial neck and that copy might be made out of them. In this your Secretary was, like Ophelia, the more deceived. Omission of the November Notes was greeted with a noncommittal silence which said neither "Why don't you earn your keep?" or "Continue your considerate policy of silence." Under these circumstances we don't know just what to do.

It seems that the entire audience for the Secretary's comments is drawn from classes graduating earlier than 1900. We have had a number of comments from secretaries and others about this vintage but, come the turn of the century, and they don't know we exist. Your Secretary is, in consequence, about to suggest to *The Review* management that he exchange places with Harry Tyler, '84. There seems no reason why the guest conductor principle should not be enlarged to include Class Secretariats.

You will judge that we have had no letters. You are quite right. What we have discovered comes via the public prints, Brother Denison (which is about the same thing) and

the indefatigable Professor Locke—who skids on his nose this time, however, and tells us all about something that we published last month. Not that we mean to look a gift contribution in the mouth.

Here is the pitifully inadequate extent of our vital statistics.

Mr. and Mrs. W. M. L. McAdams of Newton Center announce the engagement of their daughter, Miss Dorothy McAdams, to Daniel A. Brown, Jr., of Brookline. We are glad to have this evidence that Daniel recovered from the Reunion.—"Is of college interest" says a cryptic headline in a recent Boston *Evening Transcript* which refers to the recent wedding of Miss Ethel Beatrice Spencer, Smith College, daughter of Mr. and Mrs. Charles Winthrop Spencer of Cambridge to Alfred Clinton Whiting. The wedding took place in the First Congregational Church of Cambridge and only *The Review's* rigid rules prevent a considerable discourse on the palms, southern smilax, and white chrysanthemums which decorated the happy event.—On October 8, Miss Alice Genevieve McKinnon, daughter of Mr. and Mrs. Louis C. McKinnon of Watertown became the bride of John W. Sullivan.—There has been announced the engagement of Miss Frances Whitlock, daughter of Major and Mrs. Frank O. Whitlock of Cambridge to Linklater Truslow 3d.—Through Secretary-Treasurer-of-the-Alumni-Association Denison we learn indirectly that Mr. and Mrs. Warren E. Howland, now of West Lafayette, Ind., are the parents of a new baby, receipt of which was acknowledged by Mr. Denison as of November 2. We regret that we can give no further details.—As always, to all these happy souls, the Class extends its sincerest felicitations.

The one personal reminiscence which your Secretary can rake up this month was the delightful call of Ken Coachman who came out of the West and visited pleasantly for a few moments not long ago. We could wish that Ken's precedent would be more widely followed.

Now that we have reached the end of our news budget for this month, apparently the only way in which we can fill our requisite space is to quote from here on verbatim from the thesis which the Secretary wrote in 1922 on the use of Activated Charcoal As a Catalyst For the Production of Chloro-Acetic Acid by Direct Synthesis. Are you all ready—Just a minute. Long distance is calling. By George, it is none other than President Horn, all set to deliver his Inaugural. We'll go on with the thesis next month.—Eric F. Hodgins, *General Secretary*, 8 Arlington Street, Boston, Mass.

### President's Letter

I have just received one of those delightful epistles from our worthy Gensec which shows that he is as ever on the job and anxious to furnish the customers with news. It seems that he has promised the boys a letter from the President; whether he intends this to be a letter of welcome, a poem of gratitude, or a pep-up letter for more news, or for more correspondence, I'm not sure. However, I do know that I should apologize for my negligence since the Sunday of June 19. On that red-letter day after bidding all the Reunion customers bon voyage and packing

various remains of our little gathering into the rumble seat of Roscoe Sherbrooke's high-powered motor car, duties of your former traveling correspondent and Reunion Director seem to have become dormant.

Like yourselves, I too, have heard some strange stories of the happenings of the 1922 Five-Year Reunion. A few days back in Cleveland, Warren, Don Sherman, and I had the great privilege of out-fumbling Larry Davis at a very expensive luncheon. Of course Larry and I were very much interested in proving to the honorable Mr. Sherman that he had missed the event of his lifetime in not journeying to Falmouth this past June. Brother Sherman was very courteous and listened attentively to our stories of the wealth that might have been his had he won the treasure hunt, and of the presents he might have brought home had he won some of Jawn Sallaway's contests of skill, and in the end was prone to remark, "Well boys, I am glad I remained at home. What with Davis unable to recognize any of his friends on the New York Central westward bound and with Horn doing nary a stroke of work for the Class of 1922, it is just as well." Of course we were quick to remind Brother Sherman of just what the Committee investigating the water conditions of Falmouth, Mass., had to say in their very thorough report.

While in Chicago I was reminded by one C. W. Manville that due to the lengthy and more or less intelligent sessions held by this aforementioned committee, Brother Manville was able to spread some of his sunshine among the privileged gentlemen of Evanston, Ill.; this taking in as it did our old friend Arthur Meling, proves that some great good can come out of any committee meeting.

For the purpose of correcting any erroneous impressions that you may have gathered (or that your wives may have gathered) we published in full as far as possible a detailed report of the reunion happenings. I believe that all of you by this time have the aforementioned report before you. I regret that we were unable to furnish it at an earlier date, but due to the fact that the preparation of this report calls for a great deal of reflection and recollection upon the part of your Committee, it has taken us some five months. Furthermore, the Reunion being a financial success and placing your Board of Directors in a position to declare a dividend to all participating stockholders, we deemed it advisable to have this dividend presented to you as a Christmas gift.

Since that memorable Sunday, June 19, it has been my good fortune to travel through the provinces in search of business for my company as well as a renewal of pleasant social relations with several of the good members of the Class of 1922. I would speak freely of my five week-ends in Chicago as I feel it is my duty to warn each member to stay as far away as possible from the domiciles of one C. W. Manville, champion golfer of the Standard Oil Company of Indiana and one A. E. Meling, the pride of Evanston. I warn you that you will be invited to the home of our good friend, Wes, and you will receive hospitality such as you never received before. Your breakfast will resemble a ten-course banquet and your dinners will consist of an array of food such as you have

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never had the privilege of gazing upon before; but I warn you, you will pay for all this—not in so many dollars and cents, as you do when you check out of some of the well advertised hosteleries of the country, but you will pay for it either on the golf course or in a friendly little poker game.

I had the good fortune to run into Bert Weber and spend some time with him before he left Chicago for a business trip. Bert is one of the leading architects of Chicago and tales of his ability are traveling through all corners of the globe. Naturally I felt upon my departure from Chicago that I had learned a good many tricks of the trade and that among these many classmates of ours there must be a few who would be willing to pay good American money to learn that which I had paid the firm of Manville and Meling so much for, but, alas, not at them prices. I got into Buffalo and immediately sought out three distinguished members of the oft-mentioned committee which investigated our water conditions at Falmouth; honest Gyp Blood was one; Whit Ferguson and Wes Hammond were two others. I think Manville and Meling must have seen these fellows first or else Manville spent a lot of time with them at Reunion, because I could not do any business at all. In fact after Whit and Wes got through with me it looked as if we had been through a very long period of depression. Business was very spotty with Brother Blood. Nobody ever made any money paying out dollar bills and picking up twenty-five cent pieces when they were unable to pick up the twenty-five cent pieces at a faster rate than they paid out the dollar bills. But like Dempsey, the boys looked good.

Here's a fast one I heard in Mt. Vernon some time ago. Waller Morgan, the city's leading insurance man, told me confidentially that the doctor put him on a liquid diet before he left for the Reunion. Consequently he was then unable to eat any of the solid foods provided by the chef of the Mayflower Inn.

All the customers at the Reunion had a good opportunity to get around and tell each other how well they were doing, what long strides they had made toward their first million, and how hard they worked reaching the top of the ladder. Of course nobody believed anybody else so it was a nice way to pass the time. But I think I speak for the customers of the Reunion when I say that we are all anxious to hear a few of these stories from the boys that were unable to return. We presume that their inability to join us at Falmouth was due to the fact that they were just about to grasp their first million and consequently were unable to take the week-end off without great expense to themselves. Some of the boys are working on plans for impromptu gatherings at different places and in connection with different Technology alumni meetings. When this is finally drawn up Eric will send you a prospectus.

Faintly it comes to my ear that one of the brothers as he reads this last bit will remark "This is a fine game of chance that Hodgins and Horn play—first Hodgins, having done nothing, tells the boys what Horn will do and then Horn still having done nothing, informs us what Hodgins will do." Oh, well, it was ever thus. — HENRY J. HORN, JR., 48 Center Street, Kingston, Penna.

## COURSE II

Of course the Reunion should be the *pièce de combat* for this, my overture, but certainly I would not usurp the just rights of our worthy President, Traveling Secretary, and what not. His style and grasp of the general situation is such that it would be sheer folly to attempt a secondary elaboration of the affair. Enough to say that the whole Reunion was all that its press agent cracked it up to be and more.

To proceed from generalities to particulars concerning that memorable party, we should call the roll of Course II. But to do so would mean a ninety per cent roster of the delegates present. We might pick a few of the shining lights and hold them high for your consideration. There is Dyno Spaulding. Dignified, austere, sober Dyno was a rock to whom any one could fasten for consolation and advice. Lieutenant Hogan preserved the law and order of the land and occasion. All power to the U. S. A. and its legal and physical representatives. Randy, the chest, boasted proudly of his progeny, as do and did many of us to whom any one will list. The Hayes-Croft combine were in evidence early in the game, but got snowed under early in the Thursday evening offensive. Their passing game was admirable, but they went stale. Ed Terkleson, the Treasurer of the Turkelsen Machine Company of Newton, was on hand to advise the younger members of the group as to why, what and how to do. Ham Williams, the guy who should be writing this obituary, was the same old Ham of Hartford and other places. He clocked the sprints and got himself a charley horse in the evening. Johnny Molinar, with his inimitable impersonation of the one armed flute player, is still the jovial small-tool salesman, even though he is an old married man. Frank Russel entertained the boys with his winning smile. The Wasserman-Hemeon and Speir-Washington quartette had it out for blood across the bridge table. These guys, Foster and Work, could have learned things about this here bridge game from this combine.

Jim Zurlo from Lynn, Link Vaughan from Providence, Scotty Wescott from the Hub, and Benny Cooper from East Hub helped Course II lose the ball game to the invincible Fifteneers. The only trouble with our team was that the pitcher fainted. It is a question as to which did more damage to the morale of our team, the playing or the cheering. Gosh, but the fans were personal. Emmy Emerson was lost without Van Gieson, but we all noticed that Emmy had on the latest in shoes. Why not? Ed Bowditch and Chet Greening showed up before the cheers were over but still in time to see the clearing smoke rolling out over the bay. Eldor Mink journeyed from Philadelphia to the picnic and Charlie Burke came all the way from East Cambridge. Charlie ought to be working hard at his job and I suppose that since he's working for Crew Levick he has not time to write notes. Web Maschal returned from the Indies on special work for the Standard Oil Company in the way of newer and better cracking methods. We are sure he learned lots. Frank Connors was on deck to console and care for the less fortunate brothers who had not used the old slip stick in figuring out their interior dimensions. Russ Goodnough, Colby Bryden, and

Dan Reed lent an air of dignity to the occasion.

The serious side of the situation is this. I have a gleeful, joyful greeting to bear to the Class and friends of Van Van Gieson. He is the proud father of a brand new baby girl as of October 22. One solid car of felicitations and wishes was immediately consigned from the course treasury, but Van has been too busy to receipt the bill of lading. — JOHN E. SALLAWAY, Secretary, Y. M. C. A., Titusville, Penna.

'23 We are very sorry this month to report the death of one of our classmates, Carl J. Sach, VI. We wish to take this opportunity to express our sympathy to his family.

A note from Jim Robbins mentions that he has heard from George Barnes, who, he says, is engaged in furnishing Puerto Cabezas, Nicaragua, with a water supply. When last we heard from Barnes, he had acquired the title of Associate Professor of Civil Engineering at the University of Florida. Jim is still in Washington, but hopes to be transferred back to the vicinity of Boston soon. Bobby Burns, who has been in Florida for the past few years contracting, seems to have migrated north. We don't know what he is doing but we received a change of address for him to the Y. M. C. A. Easton, Penna. We desire enlightenment, Bobby! Another change in address with romance written all over it tells us that Harry Bruner has left the mines of Mexico and is now working for the Apure Vengivo Petroleum Corporation in Valencia, Venezuela. — The following announcement has been received: "Mr. and Mrs. William E. Thompson announce the marriage of their daughter Hortense to Arthur W. Davenport on Friday, November 4, at Richmond, Va." There is also the information that Art and his bride will be at home after November 15 at 3408 Park Avenue, Richmond, Va. We recently learned that Forest G. Hunt was married on October 29 to Miss Elizabeth Marsden at St. Louis.

We received the following report of a successful gathering, on October 19, of New York City Alumni of 1923 from Ollie Hooper: "I just want to tell you the success which we had in finding enough 1923 men in town to hold a dinner. On October 19 it was held at the Technology Club. Announcements were sent to 125 men in and near New York, from whom we received about forty answers of either yes or no. The final result was that twenty men were present, which included all the yes men and a few more besides. They were: L. L. Tremaine, W. J. Lutz, O. L. Hooper, R. E. Valentine, J. J. Murphy, O. P. Clapp, G. J. Tzougros, C. M. Mapes, J. W. Sands, C. D. Dippel, J. A. Pennypacker, W. S. Marder, Jr., W. W. Zapolski, H. A. Barnby, E. J. Thimme, A. A. Spiliotis, B. B. Drisko, Harry Green, David Grelick, and G. W. Seymour.

"It developed into quite a guessing game, trying to fit an unknown name to a known face. All seemed to be very prosperous, some married, and some with the finest children in any given locality. (It would develop into one fine fight if the families ever attended a dinner.)

"By chance we discovered that Dean



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Burton was visiting in the Club, so we insisted on his talking a bit. He talked about the one thing nearest his heart these days, the dorms. Then we stretched out the evening by listening to each one give his personal experiences and history since leaving school. They were mighty good talks. The meeting broke up, leaving in the hands of a committee of Tremaine, Zapolski, Marder and myself, the arrangements for a meeting about January 15."

This is good work, boys, and here's hoping you will have many more such gatherings. If there are any '23 men around New York who didn't receive an announcement of the gathering, the reason is lack of a correct address, so drop a card to Ollie Hooper at J. G. White Engineering Corporation, 43 Exchange Place, New York, telling him your whereabouts. Also bear in mind the meeting on January 15.

While speaking of dinners, here's a date for Boston men to remember. Plan to eat your noon day repast on the fourth Tuesday of each month at the University Club at the Technology Table. Let's try and have a big '23 crowd on these days. — ROBERT E. HENDRIE, *General Secretary*, 12 Newton Street, Cambridge, Mass. H. L. BOND, *Assistant Secretary*, 18 Greenwood Avenue, Hyde Park, Mass.

## COURSE II

I will be located in Nappanee, Ind., with the Vitreous Steel Products Company for the next year, so that ought to help a little as the address is easy to remember. Just send those letters to H. B. Gray, Nappanee, Ind., and there is no question about my getting them. I wrote plenty of letters, but the answers were about as plentiful as the Course II contributions to the athletic fund. The first letter came from Louis Greenblatt. What a wonderful correspondent that boy makes! He didn't have much to offer in the line of news because he is still single, working at the same job, hasn't run into any Course II men, and everything is just about the same as it was when we heard from him last. George Johnson has changed his position, and is now covering the New England territory for Marsh and McLennon of New York. He complains of the same thing I do, that of rarely meeting any Technology men. George is the authority for the statement that Edward Battey, Jr., has joined the ranks of the married. But I'm the authority for the statement that Battey hasn't joined the ranks of letter writers. Best of luck, anyway, Battey. All us good men had to fall sooner or later.

I got a nice long and interesting letter from Bill Leslie. He is still with Manning, Maxwell and Moore, and announces that he has made a small amount of progress. Bill is one of the few fellows who has been with the same firm since graduation, and I'm willing to bet that his idea of a small amount of progress would satisfy most of us, for I know Bill's ability. In addition to his day job, Bill teaches mechanics at the Bridgeport Engineering Institute. Page Professor Hayward. All that seed didn't fall on barren ground after all. About the only other piece of news in Bill's letter that is general is that now Bill is the father of two little girls. Wait until Bill starts buying clothes for two flappers. If what they tell me is true, he is going to have his work cut out for him.

Also I got a post card from Tremaine which didn't say anything except that he had changed his address. Now can you beat that? A man with ambition enough to check you up on his address, but without enough ambition to write any dope about himself! I hope he reads this and feels so highly insulted that he sits right down and sends me a long letter. I don't care what he says to me or about me as long as the letter contains news.

I received a mighty nice letter from Verner. He has been working for four years on a job of developing and operating a plant for copper plating roofing. Now the plant is being closed down which leaves him temporarily out of luck. I imagine that he will be placed by this time, but if any of the crowd know of an opening they may be doing him a real favor by telling him.

He sends me the following news items. Al Perry is in Florida. Jess Willard is running a radio shop in Natick, Mass. Bill Godbout is a chemist in Patterson, N. J. Verner has a boy two years old now. Since writing the above I have received a long letter back that I had written in answer to Verner at Perth Amboy, N. J., so he must have located some other place. If you see these notes, Verner, just credit me with doing my best.

I got a letter and a check from Bill Gurney. Bill writes that he is still with Stone and Webster and the Public Utilities game. He is working with the Montany Electric Company, which is located on the other side of the river from Fall River.

Then there was a mighty nice letter from Bill Scofield. Honestly, you'd think I was a good prospect for coal to see how nice that letter was. He told me about Frank Havens's marriage which was news to me. Frank, I'd rather get this kind of news first hand. What are you holding out for? You have got plenty of company. You know I went and did that same thing not so very long ago. I'm going to copy one complete paragraph from Bill's letter, one that doesn't concern a Course II man, but a man whom most of our crowd still remembers with pleasant thoughts. "There are a number of Institute men around here who belong to another class of course. One of these whom I'm sure you will remember is Harold Hedberg. He was assistant to Professor Haven in Machine Design, and a mighty fine chap. He is now assistant superintendent at the Albany Felt Company, is married, and a few weeks ago, became the proud father of a baby girl. A few weeks ago, George Hurley spent an evening with me, during some test work which he was doing for the New York Central at Selkirk, just outside of Albany. However, I have not seen or heard of him for some time now, so I judge he is no longer in this vicinity."

Bill still signs himself as sales agent for the Rochester and Pittsburgh Coal and Iron Company. He writes that business is holding up pretty well and that they manage to keep him busy.

My last letter on hand at present comes from the United States Patent Office and is signed by Algernon Flournoy. He is apparently very enthusiastic about his job and has great hopes for the future. From other fellows with whom I have talked from time to time I have had the same impression that the Patent Office offers a real opportunity for men with engineering or legal training, and I'm mighty

glad Flournoy has been fortunate in getting into this line.

Best regards to all the gang with the same old plea. Please write! — HAROLD B. GRAY, *Secretary*, Vitreous Steel Products Company, Nappanee, Ind.

## COURSE III

Only two letters have drifted in to me from the Club in a long, long time. One of these is from Mal Carey who writes from Arvida, Canada. He writes: "I suppose this sounds like a voice from the dead. Things are pretty dead up here 'neath the pale polar planet or star, or whatever it is. Not too bad though, as I have a car and therefore get along pretty well with the French mam'selles. At present I am the more or less able assistant to the reduction plant superintendent. I wouldn't mind following this letter back to Sunny California, you may be sure. Just now we are preparing for a long siege by 'Old Man Winter.'" [Carey, I will give your name to the Los Angeles Chamber of Commerce.]

The other letter is from Bill Niekamp who is situated in the city of brotherly love with the Eagle Pitcher Lead Company. Bill writes that the only news he has is that he has been married just five weeks. Congratulations will reach Bill in care of the above concern at Fourth and Cherry Streets, Philadelphia.

Any other members of the Class who would happen to read this column should have a guilty conscience on two accounts: first, because they haven't written and given me any news of themselves; second, because the above two boys are the only ones who have responded to our Class Athletic Fund appeal in this Class and Course. To those of you who passed M23 a method of relieving your guilty conscience should be apparent.

I might add that during the summer a son and heir has been born to our family and that he is getting along in fine shape. I am still trying to peddle machinery for the Sullivan Machinery Company in Los Angeles, but I have plenty of time to read letters from the gang if you fellows will take the time to drop me a line. — BENJAMIN P. LANE, *Secretary*, Sullivan Machinery Company, 470 East Third Street, Los Angeles, Calif.

## COURSE X

In reply to the cards which were sent out in September we have received five most interesting letters, each with its little pink or blue or green check for the Athletic Fund.

Parker B. Holden writes from Woronoco, Mass., that he is with the Strathmore Paper Company as assistant superintendent and invites us down to see them make the finest paper in the world. He says he heard from John Boyden Carpenter, Jr., while the latter was vacationing at Niagara Falls. — Erwin Schoffel is still concerned with production at the Aluminum Company of America and writes: "Now that Louis Freeman is married, I imagine the percentage happy is rather high in our old X-A gang. Luger and Kibbe, and you probably know several others. How about Cotter and Davis?" (You go back and read the May and November Reviews again, Schof.)

William S. Brackett reports, "Good times being had by all five Technologists, of recent vintage, with Carbide and Carbon Chemicals Corporation, the fastest growing organization of its kind in the United States. — R. K.

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Turner, H. D. Kinsey, I. L. Murray, D. G. King and myself—that latter being the oldest grad doing time at this plant.” Frank Archer is with the United States Radiator Corporation in Syracuse, but he expects to return to Buffalo shortly, from which city we hope to have more letters like this one: “Bill Godbout is now in Rochester. His latest addition to the family happened some time after August 20. It was a boy which proves he is from the West where men are men. Sox Kinsey and I crashed through on August 19 with girls. That doesn’t show where we are from, but it is probably O. K. with Sox as it is with me. I am still expecting a visit from Jo Mares and Joe Preston sometime this fall. They had better pick up luggage pretty quickly or they won’t see a real football team play here in Syracuse. That’s the place where the trains run through the center of the streets and traffic jams are what Sherman said about war.”

F. LaVerne Smith from way out in Port Arthur, Texas, says, “There is only one thing I hate worse than letter writing, and that is getting a haircut. Of course you will wonder how long my hair is by now, but I couldn’t tell you. I am working for the Gulf Refining Company in the Experimental Laboratory and used to be a so-called research chemist in the Research Laboratory, but my job now is crude oil examination; the rest is secret. . . . Do you ever use tear gas any more, Harold? Well do I remember some you had in the Dorms.”

There are a number from whom we haven’t heard since graduation. Who’ll give us a few facts for next issue? Special invitations extended to Cohen, Burkhart, Keck, MacDonald, Meakin, Palmer, Smart, Walton, Mossman, Leary and McLane.—H. F. COTTER and D. S. DAVIS, *Secretaries*, Bureau of Tests, International Paper Company, Glens Falls, N. Y.

#### COURSE XIV

Your Secretary attended a Class Dinner at the Technology Club in New York a few weeks ago and is glad to report that Course XIV was very well represented. The attendance was only twenty, and of these, there were XIV men. The other two were Clapp and Drisko. A speech concerning his personal history since leaving school was made by each man there and as it is easier to talk than write we learned a lot that we otherwise would have missed. We did not know, for instance, that Clapp had spent many months as a gentleman plumber, or that Benny Drisko had been disappointed in love. C. P. was also an efficiency engineer for the Carborundum Company at Niagara Falls for some time before coming to Perth Amboy, where he is now.

The ranks of the bachelors in the Course were further decimated last month by the defection of E. P. Roll, who was married on October 22 to Miss Margaret Marie Fales, of New York. We are sure that Roll and his bride have the best wishes of the bunch.

The response of the Course to the Athletic Fund request for a mere half a buck has not been all that could be desired. Only six fellows have so far come across. We think that sending us the half dollar would be a splendid excuse for the delinquents to kill two birds with one stone by dropping us a line at the

same time. Dave Skinner sent us a half dollar loose in an envelope along with a complaint that he had already sent one to Bond! The postal clerks are only human. Dave has been promoted to head of the Conveyor Department of the West Lynn Works of General Electric and between his job, his car, and his intended, he is kept on the jump.

Charlie Snow writes that he was doing research with the Committee on Industrial Illumination of the National Research Council until last June when the research automatically ended, owing to the fact that they had spent all the money. He is now giving a course at the Institute in illumination. He says he likes the job very much but does not know how long he will be able to afford it.—

JOHN W. SANDS, *Secretary*, 158 Wardwell Avenue, Westerleigh, S. I., N. Y.

**'24** On October 15, the fall “Razzle-Dazzle” of the Class was held in New York. This is a periodical event of the bunch located in and around New York. I will let Bill Robinson tell it: “We gathered twenty-two strong in the now famous Boboli Garden in the Village. Toasts were drunk to the Class of 1924. The meal was given over to the welcoming of strayed ones into the fold again. Reminiscences were recalled to mind and the stories told on each other showed that the characteristics, prominent at the Institute in each, have not been forgotten. The scene then shifted to the 44th Street Theatre where we occupied the first row balcony. Ted Simonton, Dick Lassiter, and Jack McCoy thought they were attending another Technology Night Show. The show was one of the best. A census taken by Bill Coleman of Pret Littlefield, Mayoral, and Quirin showed the fifth girl from the right to be the choice of critical eyes. And thus another ‘24 Razzle-Dazzle passed into pleasant history.”

Mr. and Mrs. J. H. Townsend have announced the birth of another daughter, Alice Ferguson, born on October 25 and weighing six pounds and six ounces. Their home is at 337 Maplewood Avenue, Montreal, Canada. I also have a note that William Robert Tayler, II, was married on October 15 to Violetta Klavin at Riga, Latvia. The local register was signed by McConney Werlich, '15, American Consul, who writes that they are now on a honeymoon through Finland and Scandinavia. Tayler has been the European Technical Advisor for the United States Machinery Company of New York, which organization makes veneer, saw-mill and wood-working machinery.

As you can see, we are still in need of having you fellows send in items about yourself. The notes this year to date have shown a falling off. Please get busy and do something so we can finish strong.—HAROLD G. DONOVAN, *General Secretary*, 139 Girard Avenue, Hartford, Conn.

#### COURSE I

Before this poor excuse for a news letter reaches you, you will already have received two copies of the current volume of The Review and will have noted that the Course I notes are conspicuous by their absence. Apparently my liaison work is going from bad to worse. I have been stuck out in the

hinterlands since the latter part of July and in spite of the fact that the locality boasts of a post office, I have completely lost touch of the wandering civils. I had hoped to return east long before this and obtain much data by word of mouth but unforeseen delays have prevented. However, it now seems certain that I will realize my hopes within a couple of weeks and I can promise that the next issue of this publication will bring forth some startling news.

Judging from the change of address notices which I have received, there is a store of interesting news to be recorded if I can ever arrive at a source of adequate information. Among the most interesting of these notices is one which informs me that Admiral Kuo has left the employ of the American Bridge Company and is now working for the famous Ralph Modjeski.

Perhaps a word or two about my own activities will help to give this communication a dignified length. Last June an old timber dam on the headwaters of the Wise River in Montana parted company with its surroundings and the impounded water caused a miniature Mississippi disaster in the Wise River valley and that of the Big Hole River into which the Wise River flows. Among other things this flood wiped out the diversion dam of the Butte Water Company at their pumping station located on the Big Hole. The firm with which I am connected undertook the design and supervision of construction of a concrete dam to replace the one destroyed. As my work at the Black Eagle re-development was virtually completed I was sent here from Great Falls to act as field engineer on the construction. The job is a small one but has proved very interesting and at times very difficult. From here I expect to return to Great Falls for a few days and then back to the home office in Boston.

Please coöperate with me in the near future and send me news of yourself and of any of the other men with whom you have come in contact.—J. D. FITCH, *Secretary*, Charles T. Main, Inc., 201 Devonshire Street, Boston, Mass.

#### COURSE XIII

Perhaps you have heard that another of our esteemed course-mates has announced his desire for the hand of a certain maiden. None other than El Thayer. He vows that Miss Barbara Senior of Weymouth is about the best girl he has met and announced that fact to the world last June. We are now listening for the bells to peal.

Maybe you also have heard about a big cruise one of our members took last September. It is destined to be a life-long one but it doesn't seem to bother him much. Gordon (Peggy) Joyce and Miss Ethel Maybe were married on September 17 at Malden, Mass. Ernie Stone stood up as best man while Ed Russell, El Thayer and myself assisted. The event was delightfully informal and very pretty. After a game of hide-and-seek to Boston, the pair sailed for Maine and a glorious two weeks cruise along the upper coast of Maine. Peggy reports an excellent trip with fine weather. Soon after their return I enjoyed a visit to their new home in Malden where things nautical certainly reign. Peggy admitted that married life



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agreed with him when he said his weight had increased ten pounds in five weeks.

While we are talking of married people, let us not forget that a year ago about October 1, Gubby started his long cruise. I haven't seen Gubby since that day but I am sure he is very happy. He has been assigned to a new position with the National Biscuit Company in Baltimore which takes him farther away from the fold. Don't forget to put a red dot on the map at Baltimore.

I haven't heard from Ed Russell this fall but when I saw him in September he had just about recovered from an operation on his breathing apparatus and was still working near Boston. — Frenchy Rousseau is in New York and lives in Summit, N. J. We hope Frenchy Junior is well and happy.

A few of the old crew I am afraid have been lost in the shuffle. Lest we forget them, I will note down the roster of missing mates: Ingram Lee, Richard Frost, James Lord, James Wong, and Harold Young. May they rest in peace or write.

The writer suggests that we have a revival and include in our New Year's resolutions a resolve to write a letter occasionally to the course correspondent. Don't be afraid to write us of your successes; we will not run you for President. Please send communications to Gordon Joyce, 16 Grove Street, Malden, Mass., as he is now the active Secretary of the Course. I am sure we all enjoyed greatly his August log and it certainly proved his ability in that line.

There are not very many Twenty-Four men around Pawtucket. The only classmate I have run into for some time was Ed Moll who happened to be here on some mill economics work. We enjoyed a half-hour's talk on post-college experiences.

My work in the public utility business remains very interesting and instructive in the ways of business. My best regards and good wishes to all our friends who may read this attempt at journalism. — G. F. ASHWORTH, *Secretary*, 15 Trenton Street, Pawtucket, R. I.

**'25** News seems to be getting scarcer as time goes on, and Roger Ward has forgotten to send in any news at all for two months. Gerald B. Milot is going to help remedy the first complaint by assuming the job of writing news about the chemists. His address is, Merrell-Soule Company, Syracuse, N. Y. Course V men take notice! Roger Ward's case will stand personal investigation, for we must find out what Garden City, or possibly his Chevrolet, has done to him; he used to be such a charming writer.

The Pirates' Den was the scene of our November dinner and dance which Don Wheeler, Roger Parkinson, Rake Possiel, Paul Hess, Ed Kusmaul, Wilder Perkins, Don Fife, Bob Cowan, and myself attended.

I wish to remind those of you who are in Boston, or have occasion to be there, that there is a Technology luncheon at the University Club, 40 Trinity Place, every Tuesday. I am designating the third Tuesday of each month particularly for our Class. Here's a chance to meet your classmates in Boston as we do in New York; only it's a Tuesday lunch there instead of a Wednesday dinner at 17 Gramercy Park.

The Boston *Evening Transcript* of July 25 announced the engagement of Miss Ida May Bradford, a Swampscott teacher in the Palmer School, to Richard J. Chapin. — On Saturday, November 12, Arthur M. Sharp and Miss Verna Eloise Burwell were married in Providence, R. I. The following Monday they sailed for Europe on the *Samaria*. Sharp is a chemist with the Yacht Club Bottling Works of Centredale, R. I.

Roger Parkinson and I managed to get up early enough the Sunday the cross country team came to New York, to meet them at the boat, and guide them to the Murray Hill Hotel; the quietest and most restful hotel in the city. Captain Pete Kirwin was the only man on the team we used to run with: after this Oscar Hedlund and Doc Johnson will be the only ones we knew when we too ran up and down the Esplanade. Each year the team comes here we decide to go out in Gramercy Park and see if we can still run a few miles, but so far we haven't even dug up our track shoes.

W. T. Brown, Jr., who has been with the Norton Grinding Company in Worcester in the operating end, has been transferred at his request to the sales department which gives him an opportunity to travel around the country dealing with the users of abrasive material and bringing him up against all sorts of problems and perhaps incidentally to drop him on some of his classmates. So far his travels have been to Utica, New York and Grand Rapids. — FRANK PRESTON, *General Secretary*, 17 Gramercy Park, New York, N. Y.

#### COURSE I

A nice letter from Olie Olsen arrived less than a day too late to go in with last month's news, so I will pass it along now. He says in part: "Since leaving the Ford Plant in Somerville, I got quite a bit of erection experience in Reading, Philadelphia and Camden. After that I went back to the drawing board for about six months. For the past five months I have been estimating and designing in the Pittsburgh office, all under contract with McClintic-Marshall Company. The estimating and designing work I like real well; two other chaps and myself worked up the quantities for the new Fort Lee — Fort Washington Bridge and we were, of course, quite pleased when we learned that this company received the award. Just now I have 1,100 feet of railroad trestle and an unloading tower to design. As the trestle is on a curve, it looks as if I shall have to dig up a few books, and figure centrifugal forces and super-elevations."

Olie's letter was the only one this month, and a few statistics of our roving population will complete this month's story. Maurice Frost is now in Cushing, Okla., with Gannet, Seelye and Fleming, Inc. Don Howe is back in Billings, Mont., at 5 Peyton Apartments, so it looks as though he's teaching again or yet. Chuck Weiler has forsaken New York for Wilkes Barre, Penna., and is with the Johns-Manville Corporation in the Coal Exchange Building.

By the time these notes get to you it will be Christmas, so here's wishing you all a Merry and a couple of Happys. — HAROLD V. ROBICHAU, *Secretary*, 28 Bow Street, Beverly, Mass.

#### COURSE II

Let me see. I suspect that two months have passed since I last chronicled the doings of the various and sundry members of Course II. In the meantime I have got some radiator shutters for the car, had a tooth filled and bought two pairs of socks but practically no news of my little classmates have I gleaned. The only reason I can think of for not having any news is that no one has written to me, with two exceptions. Kametani writes all the way from Japan to tell me that he is the proud possessor of a family. As Kamm says, "It's a boy!" I'll bet he is some proud of his young son — in fact I am myself.

The other exception was Jack Rountree. He uncorked his fountain pen to the extent of writing and telling me that he got three hours flying in at the Buffalo Airport during Reserve Officer's training week, and that he has now settled down to the job of designing a fifteen-ton crane on an eighty-foot runway. I don't mean by that he is going from the sublime to the ridiculous, but at least it is quite a come down. — ROGER WARD, *Secretary*, Curtiss Aeroplane and Motor Company, Inc., 74 Kail Street, Buffalo, N. Y.

#### COURSE VI

It is with deep regret that the Class of 1925 learns of the death of Howard A. Cyr on July 20, after an operation for appendicitis. His home was in Waltham, Mass., where he attended the Waltham High School. During his four years at college he made an enviable record and a host of friends. After graduation he went with the Long Lines Division of the American Tel. and Tel. Company. He stayed there slightly over a year when he left to take a position as sales engineer for the Industrial Controller Company in New York City where he was employed at the time of his death. We have suffered the loss of one of our finest classmates and I am certain that the Class will join me in extending our condolences to his family in their bereavement.

The Board of Transportation has claimed several of our Course VI men. My latest information shows that Benos, Tsongas, and Timprey are taking advantage of the subway situation and are employed by the Board. — Yarmack and Gagliardi are still with the New York Edison. Gag must be quite busy because every time I call him he is out in the field. Yarmack is surprising me with the stability he has attained. Previous to the New York Edison, his tenure on a job was of about the same length as a vaudeville engagement. — Ed Kerne is still in New York with the Radio Corporation. I see him quite often in the La Reine Restaurant.

If anyone has any information on Course VI, drop me, a line and let me in on the secrets. — CORNELIUS J. ENRIGHT, *Secretary*, North Street, Greenwich, Conn.

**'26** In the Introduction to the Class Notes in the December issue of *The Review*, the Editors, with their hydra-headed perspicacity, remarked how the General Secretary of this Class had abdicated in favor of a new device known as *der Konvergenzpunkt*, an automaton which subsists on Class Notes, pretzels, and beer.

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Well, the only remark that can be made from this side of the fence is that this month *der Konvergenzpunkt* has sprung a leak, or has become clogged or has refused to suck. In short, it has not functioned at all, despite the fact that it is equipped with a special long-range telescopic periscope, three varieties of Televox, and a fifteen tube superheterodyne, all adjusted to decoy into its maw choice morsels of news, and the best varieties of imported frankforts and Pilsner beer. It has been able to pick up only two news items, no pretzels, and less beer.

The two news items include on engagement and one marriage. From the Boston *Evening Transcript*: "The engagement is announced of Miss Rosamond Hoyt Lefavour, daughter of Mr. and Mr. William A. Lefavour of Winchester, to Robert Wainwright Rogers of Highland Park, Ill. Miss Lefavour was graduated from Smith College with the Class of 1926. Mr. Rogers, who is the son of Dr. Daniel W. Rogers of Highland Park, was graduated in the same year from the Massachusetts Institute of Technology. He is a naval architect and is associated with the firm of Humphreys, yacht designers, in New York. No definite plans have as yet been made for the wedding." From Narberth, Penna., comes the announcement of the marriage of Stuart John to Miss Dorothy Stewart Anderson.

The General Secretary, meanwhile (Copyright, H. G. Wells) in his easy chair, purposes once more to grease and tune up *der Konvergenzpunkt*, suffering as it is from malnutrition, with the waning hope that modern science still can contribute something to the collection of class and course notes. We shall see. May you enjoy what Santa Claus brought you. — JAMES R. KILLIAN, JR., General Secretary, Room 3-205, M. I. T., Cambridge, Mass.

## COURSE I

In our notification from Jim Killian that our notes for the January issue were due, we read, "What are you doing? I find I have considerable difficulty in keeping up with the peregrinations of the Course Secretaries."

We will now oblige with the particulars concerning ourself. About eight months with Stone and Webster Company, both in the office and field, gave us sufficient of the coin of the realm to realize an ambition of several years — to attend Harvard. So now, a little more than a year since commencement at Technology, we are re-living undergraduate days up the river. The atmosphere is quite different from that of the old days, and is pleasant enough to compensate, in a measure, for the associations that enlivened our days back at Technology. After commencement in June, we intend to go back into engineering again, possibly at Stone and Webster's.

From George Leness, who took his degree at Harvard last June, we received one of the all-too-few letters that have come our way recently. George is now working for Harris, Forbes and Company, a firm of brokers specializing in public utility financing. He says, "We are now working on a new capital structure for the Alabama Power Company. All I see of it is a huge mass of figures and miles upon miles of cross-checking or operating ratios, earnings, and so on." The "structure" is somewhat different from the

variety we used to absorb back in Room 1-150.

From the same letter we get a bit of news about G. R. Peterson. Pete turned up in New York recently, where he is working for the Beacon Oil Company at a staggering salary. George tells me he counts the pennies in a sly, furtive manner when in Pete's company.

So go the lives of two of our prosperous classmates. From Philadelphia this time comes the news that Bill Hoar has transferred his working address from the Phoenix Bridge Company, to the Department of Bridges and Buildings of the Pennsylvania Railroad, where he is well fixed financially and otherwise. Marvie Pickett and Bill continue to live at 234 Fourth Avenue, Phoenixville, Penna.

Royal Packard, we have heard, has shifted from Chicago to the backwoods of Canada, address unknown. — Of Bill Latham we have heard nothing since he returned last August from a very interesting job in Venezuela. We wish that his attitude, as expressed in these lines, was more general: "As I looked through the back numbers of *The Review*, I found a sad lack of correspondence from Course I, so, since I haven't done any writing for seven months, I decided to get a little practice by dropping you a line."

In a retrospective mood the other evening we glanced through the pages of *Technique* and mentally reviewed our friendships with the Civils of '26 from the first in the list, Whit Ashbridge, to the last, Frank Zendzian. Try it some evening, and then follow it up by writing a letter about your own experiences since June, 1926. *Au revoir!* — WILLIAM MEEHAN, Secretary, 94 Montebello Road, Jamaica Plain, Mass.

## COURSE II

Bob Nisbet valiently rose to the occasion when Course II news dwindled toward the vanishing point and writes that he is still with the General Electric Company at Schenectady and working for the time being in the wage-rate department. He managed to tear himself away long enough, however, to make a vacation trip to New York and Boston during which he rounded up a bunch of the fellows. A. H. Brown is keeping him company in the General Electric Company and specializes in designing refrigerators. Professor Berry's earnest work is bearing fruit already, apparently. Don Wheeler is still with his paper firm in Brooklyn and doing nicely, thank you.

The York Refrigerator Company gave Vernie Masterson a little variety recently by sending him down to Washington, D. C., on an ice-cream plant job, but he's back in the fold now with Ruff and St. Onge at York, Penna. — Johnnie Ostberg and Doug Walker have been sent by Ingersoll-Rand to their Chester, Penna., plant where Ostberg is playing around with Diesel engines. I hear that Walker is playing around, too, but not with Diesels.

MacClaren, Underwood, and Libby are rising young instructors at the Institute where Mac and Mark are teaching engine lab, while Art is Haven's right hand man. — Henry King is still managing to stick around, also. — Gregorio Zara craved more learning than most of us acquired, so took a master's degree at the University of Michigan. —

Juan Villanueva is back in his home town, Manila, P. I.

I've spent the last couple of months down here in St. Louis in connection with a patent infringement suit against the Standard Oil Company of Indiana, but have had plenty of Technology atmosphere as Dr. Walker, retired head of the Chemical Engineering Department, has been one of our chief witnesses, while the company's main expert is R. E. Wilson, '16. I hope to get back to the laboratories soon, but the hearings may last another month or so. — JOHN B. JACOB, Secretary, 1037 South Kenilworth Avenue, Oak Park, Ill.

## COURSE IV

Though the marriage of Robert Dean to Ruth Andrew is an event of some months past, Course IV wishes to give them its whole-hearted blessing. No doubt two architects are better than one. — It is reported that Leon Zaitzevsky is assisting the firm of Maginnis and Walsh in its architectural enterprises. — Ed Stone abides in Europe at the present time. My memory of one projet from the hand of the redoubtable Stone causes me to remark that he need not go to Venice for color. — Fred Buenz and Don Homsey are restricting their architectural activities to an area somewhat less than that of Europe — Texas. It is anticipated that Mexico will soon be added to their field of practice, making their reputation international. — Ralph Waugh is having a meteoric rise in New York architectural circles. The firm he is with, Clark and Arms, has moved its office to the top floor of the Architect's Building.

Conjectural activities: Ben Butler is developing the regional plan of the Atlantic Ocean, with a view to the promotion of ice-boating on this renowned lake. — Trevor Hogg is preparing a native Tahitian dance for production in a forth-coming ballet. — Russell Brown is compiling statistics on the number of architects that go astray, while Bob Brunton is trying to elude him. — Frank Roorda has completed his study on the conservation of time and energy. He has found that the use of Barbasol for shaving leaves him with both time and energy for the proper consumption of breakfast.

If any of these above reports prove to be erroneous, kindly submit a statement with evidence of the correct activity, whether credible or incredible. — ALAN K. LAING, Secretary, 2413 Ohio Avenue, Cincinnati, Ohio.

## COURSE XV

It seems months since I last wrote, in fact it has been months. Little if any information filters through to Washington regarding Course XV men. It is far from the center of their activities as Washington is purely residential, there being no industrial work carried on here. The dope for this article is chiefly due to Miss Barnard, our standby, who cheerfully furnished it. She knows more about Course XV men than any living person. Many thanks, Miss Barnard!

Cupid has invaded our list and the casualties have been heavy. Strange to say, the L's have been invaded first, as Ken Lord, Bill Lowell and Duke Luster have all fallen by the wayside. Ken, who was married in Rochester, N. Y., to Miss Marion White, is a sales engineer for the Reliance Electric and En-



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gineering Company of Pittsburgh. Bill Lowell is still President of the W. P. Lowell Company, Inc., in Newburyport, while Duke Luster is assistant to the sales manager of the Slatersville Finishing Company in Slatersville, R. I. Sid Miller, who is the production manager of the Glass House for the Winison-Weiskopf Company of Cincinnati, was married early in April. C. C. Ogren, now with Charles H. Tenney and Company, Boston, has also taken the fatal step. Others are expected soon to embark on the long journey, as many have announced their engagements, among whom are Al Bassett to a Miss Aldrich and Guy Frisbie to Miss Katherine Menzie. Al is making a study of business for Grevatt Brothers, Inc., exporters in New York. Guy is now doing service work, and so on, in the Seattle, Wash., office of the Hobart Manufacturing Company. He was originally in their Troy, Ohio, office. Count Colt, who is at the Institute as assistant in the Physics Department and doing special work for Dr. Stratton, is engaged to Miss Jewell.

Enough of the sentimental! Dave Harrison has come back from Missouri and is now with the Aviation Publishing Corporation in New York, publishers of *Aviation*. He is doing advertising sales work. Tom McLennan, another Missourian, is with the American Bridge Company in Philadelphia.

Alfred Dolben has wandered the farthest as he is in Buenos Aires, Argentina, installing some hat machinery for the American Machine and Foundry Company of Brooklyn. He has two observations to make: one, it costs a small fortune to run a car; and two, they have two hours for lunch, which pleases him greatly. — Al Entwistle is head of the standardization department of the Aluminum Company of America, Edgewater, N. J., while Dick Johnson is senior engineering assistant in the Division of Highways of the Public Works Department for the Commonwealth of Massachusetts.

M. L. Ash, Jr., and A. F. Butler have both gone in for time study work, Ash being with the Heywood-Wakefield Company out in Chicago, and Butler with The Stanley Works in New Britain, Conn. — Frank Crampton, who is with the Firestone people, is now in their Boston office. He was recently married to Miss Edith Crossland. Frank belongs up in Cupid's crowd but I forgot the happy event. — Bob Houghton and J. C. Manian are both working for Uncle Sam, being examiners in the Patent Office, Washington, D. C. Bob still follows the crew as he was on hand last spring at the Annapolis race.

Dick Pough and Bill Sessions, both of whom did graduate work at Harvard, are now back at work. Sessions is in a Cleveland law office while studying patent law on the side at Western Reserve, and Pough is technical superintendent of the Southern Acid and Sulphur Company, Port Arthur, Texas. — Bloomberg, who attended Harvard Law School last year, was with the Morton C. Tuttle Company, construction engineers of Boston, during the summer. — Johnny Wills, who was at the Institute last year, worked during the summer for Cowan, Dempsey, and Dengler, Inc., of New York, doing market research work. He now is at the Harvard Law School.

George Fogg and A. E. Watkins have both gone into insurance work. The former is with

the Travelers' Insurance Company in Hartford, Conn., doing statistical and analytical work, while the latter is with the New England Insurance Exchange in Boston, acting as an inspector and rater. — Three of the crowd have gone into automobile work. — Jerry Doolittle with the Glidden Buick Corporation, in Yonkers, N. J.; Bob Richardson as an experimental engineer for the International Motor Truck Company in Long Island City, N. Y.; while G. H. Spillette is doing shop engineering work for the White Motor Company in Cleveland.

Several of the fellows are with the different subsidiaries of the American Tel. and Tel. Co. Among them are Wick Eddy in Philadelphia, E. B. Stallman, Brad Young and G. E. Wingate. Young is in Pittsburgh, while Stallman and Wingate make New York their headquarters.

Thus ends the story for this time. More will follow in the next Review. Let us hear what you have been doing so that I can add it to what I have for the next issue. A Happy New Year to the Class of 1926. — THORNTON W. OWEN, *Secretary*, 739 Quebec Place, N. W., Washington, D. C.

**'27** Editorial exigencies last month demanded that the Class Note section of The Review be shortened by ten inches, and, because '27 had more notes than any other class, this column was sent to The Review's private abattoir for treatment. One of the items thus cropped because of exigencies was an already musty letter from Jim Lyles which is being left to rot in favor of fresher information gathered by George Houston and by Ed True, XV, who, over the last week-end, visited "The Coal Bin" at 189 Madison Avenue. In honor of Ed, Jim cancelled a previously-arranged poker game to tell him how to conceal his money in his B. V. D.'s where the city slickers can't get it. Jim says that Harris, Forbes and Company show signs of giving him a definite job. Heretofore he has been shifted from department to department for training.

Bert Houghton, VI, appeared in this office to show off his New York Central pass and boast of his experiences as a third-rail hurdler in the N. Y. C. yards near Ossining, at the beginning — and the end — of the New York electrification. He has his pass and would like to drop down and meet any of the fellows who happen to be in New York. His address is 20 Dale Avenue, Ossining, less than an hour from Grand Central. Bert brings word that Art Guise, X, is with Bob Doten, III, at the Cities Service Company in Quincy. Art is in the control laboratory; Bob is a gasoline treater. Bert didn't know what a gasoline treater was, but thought that Bob might be in the department that mixes in the water.

Joe Burley, XV, who returned for graduate work in Course VI, saw Glenn Jackson, XV, recently. He is now in Webster, Mass., as efficiency man in the plant of the U. S. Finishing Company, having decided that the flying profession isn't worth three years of training. — Howard Chinn, VI-C, was at the Technology end of the Vermont flood radio expedition that you probably read about in The December Review. Howard was posed as the operator in the photograph. This Secretary, the unofficial Bearer of Egg Sandwiches,

was posed with the telephone. — S. S. Barker, VI, is doing some outside testing work on a new storage battery for Professor Lawrence. For further mention of him and his running mate, Davidson, see the notes of the "Montana Society of the M. I. T." in this issue of The Review.

The hoboes and traveling salesmen of the Class should make note of Lee Miller's invitation when in Syracuse. Lee married recently, but that needn't worry you for he says, "... the meals ... are improving." — Our other married Course Secretary, Hank Steinbrenner, XIII, wrote (on his wife's stationery?) apologizing for his long silence. "If you can imagine how busy a fellow can be kept when getting a job and a wife at the same time, then you can well imagine in what a fix I have been. I am now located at 2208 West Erie Avenue, Lorain, Ohio, in the employ of the American Shipbuilding Company. It may be of interest to know that Jim Flagg, II, Ike Stephenson, XV, and Walt Cooper, XIII, were ushers at my wedding on September 9. Needless to say a good time was had by all. I see by the Bulletin of the Naval Architects and Marine Engineers' Society that Dick Tingey read his thesis before them at their meeting in New York on November 10. Jimmy Chirurg is taking a post-graduate course at dear old Harvard, and probably will become one of the Crimson's mainstays on the Charleston team." This Secretary saw Jimmy at a dance the other evening and he can testify that Jimmy is still in training — that is, for the Charleston team.

The Alumni Office has furnished this Secretary with the long-awaited address list, and before this issue of The Review reaches you, it is probable that the Course Secretaries will have made direct appeals for news to some of you delinquent ones. — Those who read the notes from the Class of 1926 can well realize that the '27 notes are being prepared this time under trying circumstances. *Der '26 Konvergenzpunkt* has developed a serious inorganic disorder, and as a consequence, the air of our office is thick with brimstone and cinders as that machine carries on its one-sided argument with The Review Editors. This Secretary closes with a wish for the victim's speedy recovery, and he hopes that your Christmas was and that your New Year will be both happy and merry. — JOHN D. CRAWFORD, *General Secretary*, Room 3-205, M. I. T., Cambridge, Mass.

#### COURSE I

Three weeks ago I went to Ohio to bring back the girl, and after a pleasant trip through West Virginia, Virginia, Maryland and Washington, arrived in Syracuse. We have a comfortable apartment here, and right now I'll extend an invitation to any member of the Class to make this a stopping place when in Syracuse. The meals aren't bad and they are improving.

The response from the fellows since the issue of The November Review surely seems good. It still is a low percentage, though, and next month I should like to receive more letters or cards.

Reggie (Jake) Jacobs, our efficient secretary of the Civil Engineering Society, wrote an interesting letter a few weeks back. Reggie started out with the Connecticut State Highway Department but wandered

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over the State line and was grabbed up by the New York State Highway Department. He now is on bridge construction on a road through the Catskill Mountains. His address is Y. M. C. A., Kingston, N. Y. Jake says that the Lunden Brothers are with the Connecticut State Highway Department, that Johnnie Kochanczyk is employed by the New York Board of Transportation in the construction of subways, and that Izzy Karp is down in Kentucky. — While in New York I met Greenhalge and Fitzpatrick and we made a dinner date. I had to work late that night and, consequently, did not meet them. I hope that they will take time to tell me about themselves and give me their address.

Larry Cheney said he felt a little guilty after reading The November Review, so he wrote a letter right then and there. He and Al Gifford spent July and August in Europe, visiting France, Italy, Switzerland, Germany, Holland, Belgium, and England. Larry said he read a report by the Class of '90 and it seemed as if nearly every one in that crowd went abroad this last summer. He hopes we can do the same after we have been out thirty-five or forty years and is already looking forward to holding the fortieth reunion in Paris. I'd suggest the fifth in that city. Marc Eidlitz and Sons, a construction company of New York, claims Larry as one of their employees. Larry's job is on the Sterling Memorial Library which the company is building for Yale University. His address is 31 Audubon Street, New Haven, Conn.

The letter from Bolick Shadrake gave information of himself and Johnnie Kochanczyk. This pair is inseparable and some of the fellows will remember that they were "champion door slammers" at the summer surveying camp. It was never a secret when they left their barracks for they always closed the door after them. Shadrake is in the structural department of the Erie Railroad in New York. He and Johnnie want all mail addressed to 108-48 Liverpool Street, Jamaica, N. Y.

A mighty interesting letter came from Ensign John A. Herlihy, B. O. Q., Naval Air Station, San Diego, Calif. Jack informs us he is on active duty with the navy at San Diego, and is flying with a torpedo-plane squadron. "These planes are too large to be much fun flying but they are not too bad. I am also attached to the engineering department of the squadron and find much use for my civil engineering training. Just the other day I had to figure a roof truss to see if it would be safe to hoist a 13,000-pound plane from it. We hoisted the plane and the roof did not cave in so I guess the old slip-stick is still working. I like the climate, the job, and the girls out here. . . ." Jack certainly is in luck.

Several weeks ago, Carl (Andy) Anderson, VI, came from Albany and is now taking the training course with the New York Telephone Company in Syracuse. Andy is in the General Engineering Department, so expects to go back to Albany in a month or so. His address is 117 Onondaga Avenue, Syracuse, N. Y. I wish to say in closing that I hope several others like Larry Cheney feel guilty upon reading THE REVIEW. — LEROY G. MILLER, *Secretary*, 1133 Bellevue Avenue, Syracuse, N. Y.

## COURSE II

Most of my information continues to come second-handed, but I will try to embellish it with colored inferences, as much as is consistent with good literary ethics.

First, a *bona fide* bit of news from Bud Gillies in the form of a letter dated November 13 and postmarked Fifth Fighting Squadron, U. S. Navy: "Outside of one letter from Larry Coffin, I haven't heard from any one and I haven't seen a soul. This part of the world doesn't seem to be included in civilization. [Being of an optimistic nature, I conclude that Bud means he hasn't seen a '27 man.] This Navy life is so much better than anything I had expected that it is like a dream most of the time. The officers in my squadron are all fine and they have done all they could to make me feel at home. I am Assistant Engineer Officer of the squadron and find it very interesting work. I have a plane of my own — a Curtiss Hawk, which is a single-seater fighter that will make about 160 miles per hour — and I fly most every day. I have made quite a few trips and hope to get up to Boston after the first of the year. We are having a concentration period now which consists of all sorts of war problems and the like." Here is an opportunity for some benignant correspondent. Bud's address is Naval Air Station, Hampton Roads, Va.

Fred Glantzberg is still sprouting wings down at Brooks Field, Texas. A letter postmarked November 2 states: "We started in down here with a class of sixty-five officers. We are half way through now and there are nineteen left. We have completed the work on training planes and most of us have passed the final check. Now we are waiting for them to start the new stage on D-H's. That ought to be some time this week. When we finish here (some time in February) we go to Kelly Field for advanced training. That course lasts four months. With luck I hope to be in Boston again next June, but not before, I hope."

Now for some of the second-hand news. Bill Hogan, you will remember from The November Review, is circling the globe in a tramp steamer with Dan Metzger, VI. The last I heard they had arrived at Honolulu. It seems that Metzger spends most of his time in the bow, shooting fish. Hogan probably busies himself with the landing net. — Charlie Hurkamp was reported to be in St. Louis, although I have been unable to scare up his address. — Bert Nadler is in New Orleans with the Celotex people, and, like Hurkamp, is listed among the missing because I haven't his address.

In checking over the roster of Course II men, I have made the startling discovery that of the eighty members of our Course, I have received letters from only seven. I have heard in an indirect way of seven others, and the remaining sixty-seven are among the missing. Let's cut this figure in two by next month. — DAVID R. KNOX, *Secretary*, 4506 Allendale Avenue, Detroit, Mich.

## COURSE V

Let us attempt to keep all our New Year's resolutions but let us actually keep in contact with that group that left in June.

I have tuned in on more places than ever

this past month. Boston, New Jersey, Pennsylvania and Texas are heard from. To begin, I learn that Joe Brady has been working for the Boston Woven Hose in Cambridge. At the beginning of the summer he palled with Joe Burke. The latter has been putting in his time with the A. C. Lawrence Leather Company in Boston — that is, up to a short time ago, for I received a returned letter last week from the company stating that one J. L. Burke is not with them now. His work was using his head to show the company that they were spending too much money for some things.

The fact is that Decker is living in Montgomery, Penna. He is a furniture expert in the town. His former roommate, Dave Traux (with Peterson, Ken Vint and Jimmie Castner) says that they almost have a majority of the Class down there with the du Pont Company in Delaware. All four are very enthusiastic about their work and the company. By observing the greatest safety precautions none plan to take a rapid trip from the laboratory, although they are working with blasting squibs and learning about explosives in general. Last summer they went back to Edgewood Arsenal for a visit and exchanged reminiscences about past dates.

Rumor has it that Mac, Roger McArthur, is teaching school in Reading. I am not sure whether George Standley is with the United Machinery in Beverly or not. The last I knew was that he was going to be an assistant in the Organic Chem Lab. I hear that Art Connolly, a Course X man, is now going to the Harvard Law School.

Bugbee is still in Norristown. Philadelphia is only fifteen miles away and Bug has a very fine looking cousin there, so I don't suppose he has to lead an extra hard life. — My former roommate, Fritz Glantzberg, II, is finding out how Texas clouds appear at close quarters at Kelly Field. — I myself have been a spectator at some good football games. The University of Illinois just got the midwestern Big Ten Conference title for 1927. — I like to sing "Take Me Back To Tech" every once in a while. Keeping in touch with the bunch sure does add meaning to the song. — EDWARD T. DUNN, *Secretary*, 205 East Stroughton Street, Champaign, Ill.

## COURSE VI

I don't know just what the attraction is down in Orange, N. J., but one after another, the members of the famous "coalition" have been sneaking down there. Andy [Andrew] Anderson was the first to discover the place and he passed the tip along to Toby DeNapoli. Toby evidently found conditions as represented, and he was followed closely by Art Buckley. Art is working in the Research Department of the Westinghouse Lamp Works in Bloomfield and the three of them are staying at the Orange Y. M. C. A. — Andy has an important announcement to make. A few weeks ago he reached his majority and is now a citizen. He and Toby are probably already figuring out how they are going to beat the poll tax.

I forgot to tell you last month that one night about the first of October I was crystal gazing and saw Tweeddale alight from a bus in Newark. As I remember it, he got off at Grey Street near the Tivoli Theatre. He looked prosperous but showed no signs of



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having writers' cramp. I wish he would drop me a line.

I received a letter from Constantine Bary the other day. I am glad to see that some of you took my request for letters to heart. Bary is working in the General Engineering Department of the Philadelphia Electric Company on special engineering problems. He made some interesting observations upon the apparently tremendous amount of ignorance one possesses upon leaving the Institute, but, precise as ever, he refuses to base a generalization upon a single observation. If Bary finds he is so ignorant, what hope is there for the rest of us? I guess what he really means is that we all have a lot to learn, and, in that, I will agree heartily with him.

C. Wesley Meytrott writes from St. Petersburg, Fla., that he is located with the Florida Power Corporation of that city and is engaged in power engineering. He writes, "My jurisdiction extends to the West Florida Power Corporation and the Georgia Power and Light Corporation. We have a fine system of stations and lines here running from Jesup, Sparks, and Colquitt, Ga., all the way down to Pass-a-quillo, Fla. My work is securing load for the system, encouraging business enterprise, and so on."

And now for myself in true Tubby Rogers style. A few weeks ago, during the flood period, I was enjoying a few days off and was en route for my home in the Berkshires. I was unaware of the flood conditions when I left Boston and experienced many thrills going through Springfield and Westfield. As a result of the flood I had to make a detour through the town of Becket and it was here that the excitement began in earnest. A large dam broke behind me and I took for high ground in my Ford on three cylinders. (Yes, I have acquired a 1927 Ford sedan. Prosperity?) I managed to escape the main fury of the flood by a matter of feet and, stalled in a pasture near the road, I watched houses float by me. When the water had subsided I found that what had been the road on which I was riding was now merely a gorge about fifty feet deep and at least a mile long. That left me stranded wishing I had an airplane instead of a Ford. Several days later, with the help of a team of horses, I managed to get my car up through the lots and back onto the road. The flood that left me marooned without any road took with it eighteen houses, three stores, three miles of railroad track, three factories, and six bridges.

But here is where the puff comes in. A few days later an item crept into the home paper as follows: "Charles Bartlett spoke before the Stockbridge Chamber of Commerce yesterday at their monthly meeting. He described conditions in Becket and related his experience there during the flood." You really have to know Stockbridge in order to fully appreciate that.

But speaking of floods, let's have a flood of letters next month, fellows. — CHARLES A. BARTLETT, *Secretary*, 27 Ifley Road, Boston 30, Mass.

## COURSE VII

I find myself in a very peculiar position. Of the six (I think there were six) members, the only ones I know about, aside from myself, are Marshall Jennison and George Morrill who are still at the Institute and

I. D. Thrasher. As to an informal progress report, Jenny is now an instructor or an assistant and seems to have his hands full making over the Course. George Morrill is making a statistical study of the streams in Massachusetts as to their oxygen demand and what not, that might affect their use as water supply or means of sewage disposal. He seems to be all tied up in figures, and I can't tell whether he is trying to hide a dislike for them or is apologizing for a very real interest. Figures don't lie, but I wonder about statistics.

Thrasher is studying medicine at Johns Hopkins, and Carl Weiss claimed to be going to Yale for the same reason. It is also whispered that I. D. is married. However that may be, it is certain that Boston lost many of its best student nurses when he moved to Baltimore. So far I have heard nothing from Foster, but Jenny says that he is a bacteriologist with the General Sea Foods Corporation at Gloucester.

I've been busy here. I haven't seen many others, but I'd be willing to bet that there are no finer departments to learn the public health game in than this one in Detroit. — GEORGE B. DARLING, JR., *Secretary*, Department of Health, 1300 Beaubien Street, Detroit, Mich.

## COURSE XV

It's really getting to be quite a habit now for us Course Secretaries to start off with a moan on behalf of the overwhelming majority who failed to supply us with news of themselves and then to conventionally pass the buck to Johnny for not supplying us with the addresses of our classmates. However, although I moan my moan along with the other Secs, I have a few scraps of news that may prove interesting. When I can begin making use of the address list of the Alumni Association, I expect, with the proper coöperation, to be able to corral many more items than has been possible up until now. Short shrift though it is, let's be at the gossip, or what have you?

Dice Coburn sent me a nice long letter from 3039 East 91st Street, Chicago, where he is in charge of the ammonia stills in the coke room of the Wisconsin Steel Company. The poor chap works seven days a week and changes eight-hour shifts every six days. He certainly has my sympathy and best wishes for the future. — He had a surprise visit from Warren D. Smith, who was going through the plant on an inspection tour. Smitty hardly recognized his classmate under the mask of grime, but, needless to say, they had quite a chat.

I was really surprised that I didn't run into any of the bunch in Europe this summer. It seems that about half of Course XV was over there. Dike Arnold and Tom Grier were gadding about the continent in a new Buick roadster. Smitty says that he ran across them and also that he saw P. C. Eaton "somewhere" in Paris. I was there too, and believe me this "somewhere" is a great place. P. C. is teaching English at Exeter.

Johnny Field has at last settled down to business and is in St. Louis with the Southwestern Bell Telephone Company. At time of going to press, he was living at 4472 Maryland Avenue, St. Louis, but was expecting to be transferred to Dallas, Texas, before long. —

Ken Smith is working on a construction job in Hoboken, but I can't give you any further particulars on Ken till he helps me out with a wee note. — The Count, better known as Amund Enger, is back in his native Norway helping his Dad make bullets. Either the Norwegians have an army or the hunting is good. Amund expects to go to Germany to study about January 1. I hope he'll write and tell me about his plans for the future and also a little about his studies (whatever they may be).

Alden G. Reed is either an extremely busy young man or else he is troubled with an empty fountain pen or a terrible fear of publicity. Really, one might draw any conclusions from the queer missile which came to me from him the other day. When I opened the envelope, all I could find was a letterhead from the Boston office of the American Radiator Company, and a business card with the name A. G. Reed. A Course Secretary certainly needs to have a well-developed sense of humor these days.

I had a rather dramatic meeting with Julius Friedman one night in Grand Central Station, New York. He was on his way to Boston where he was to start on the road, selling shoes. The poor chap greeted me like a long lost cousin — really I don't think he had seen a familiar face for weeks. At any rate, I soon found out that he had had a run of pretty tough luck and was pretty much down on the world in general. He had his nose fractured in an auto smash and was confined to bed for a week in New York without a friend to take care of him or even talk to him. Then he lost his job and had to wash dishes in a hotel to pay his rent. Finally he decided to go on the road and try to save enough money for a trip to Seattle. I certainly wish Julius better luck in the future. Believe me, an incident like that makes a chap with a good, steady job stop and thank his lucky stars.

It was just like old times to see good old Jim Lyles the other day. Jim and I spent an evening together talking over all that had happened to both of us since June 7. He told me all about his wonderful summer in Hawaii with Ralph and Paul Johnson (and a certain other party whose name I do not know). Jim finds living in New York a bit expensive, but is enjoying his work very much. I expect to see Jim quite often as he is near at hand. He has heard from quite a few of the boys so that I'll pass the dope on to you in the next issue of *The Review*. — Speaking of Hawaii reminds me that Frank Mesker is going there for his honeymoon. The wedding will take place on January 3, or thereabouts. I had a letter from Frank lately and he says that the St. Louis tornado just missed his house by a block or so. I'd say he was a pretty lucky boy, wouldn't you? — Warren (Judy) Priest is located somewhere in Elmira, N. Y. He got his degree O. K. although as to the nature of his present labors I have no information.

Your humble and obedient servant is still with the Murphy Varnish Company in Newark, N. J., and more interested in the work than ever. At present I am doing research work in the lacquer laboratory. There aren't any other Technology men in the plant, which is always a help, so just at present there's nobody left to write about. — GEORGE C. HOUSTON, *Secretary*, 612 Prospect Street, Maplewood, N. J.

# News from the Alumni Clubs

## *The Technology Club of Cincinnati*

IN November the Technology Club of Cincinnati, at one of its regular Tuesday luncheons at the Hotel Havlin, had the pleasure of entertaining Professor William Emerson who was in the city in connection with his work for Cincinnati's new public library. Professor C. Howard Walker, also of the Architectural Department of the Institute, stopped to lunch with us at this time. His name was on the program of the Regional Conference of the A. I. A., held in this city recently. Our architect members turned out in full force to welcome him and were enthusiastic in their appreciation of his part of the program.

Our architects have been doing themselves proud on our local public projects, and now comes one of our civil engineers to take the most conspicuous place in present city affairs, Henry M. Waite, '90, newly appointed chief engineer of Cincinnati's \$75,000,000 Railway Terminals. Henry M. Waite is an old member of the Technology Club of Cincinnati, as he is our former city engineer. He gained prominence in this locality also as the first city manager of Dayton, Ohio. He has the club spirit and has been present at a number of our recent Tuesday luncheons.

It is gratifying to see our Technology men coming to the front in Cincinnati as our public undertakings grow in size and number.

— WILLIAM V. SCHMIEDEKE, '12, *Secretary*, The Max Penker & Sons Company, 123 Valencia Street, Cincinnati, Ohio.

## *Niagara Falls Technology Club*

The annual meeting of the Niagara Falls Technology Club was held on the evening of November 14 at the Niagara Club, President Harry Noyes, '90, presiding. After enjoying an excellent dinner of fried chicken, the meeting was called to order by President Noyes; and Jake Strader, '96, chairman of the picnic committee for the past summer, was given a chance to explain why no picnic was held. Jake tried to pass the buck as usual, but was not allowed to get away with it. It was unanimously decided that the picnic committee must function even at this late date, and Jake agreed to stage a party for the boys at the Font Hill Golf Club, Font Hill, Ontario, Canada, on Saturday, December 3. It seemed to be the consensus of opinion that the location was particularly well chosen, although the date was later than desired.

Following the disposition of this brief but important matter a short report was submitted by the Secretary and nominations for officers for the next year were called for by the President. Percy E. Blood, '97, was nominated for President, and Robert A. Montgomery, '19, for Secretary-Treasurer. Nominations were closed and the above nominees were elected unanimously. The meeting was declared adjourned, and the party retired to the new bowling alleys recently installed by the Niagara Club where some interesting

matches were staged and some liberal fines were collected and turned over to the newly elected Treasurer. — W. C. READ, '09, *Secretary*, Electro Metallurgical Company, Niagara Falls, N. Y.

## *Washington Society of the M. I. T.*

The November speaker luncheon was held on the seventeenth at the University Club. Dr. George K. Burgess, '96, Director of the Bureau of Standards, gave an interesting account of the International Conference of Weights and Measures which he recently attended with President Stratton. Among the twenty-five members, more or less, attending this luncheon were Proctor L. Dougherty, '97, Chairman of the Board of Commissioners of the District of Columbia and Major W. E. R. Covell, '23, assistant engineer commissioner of the District of Columbia.

Our President, W. C. Dean, '00, announced that election of officers would be held at the speaker luncheon scheduled for December 16, and appointed Allen Pope, '07, chairman of the nominating committee. — A. E. HANSON, '14, *Secretary*, Government Printing Office, Washington, D. C.

## *Technology Club of Rhode Island*

Every one present at the first meeting of the Club since summer sniffed the air often, but in vain, for that terrible odor usually associated with a gas works was entirely absent when the Providence Gas Company were our hosts on October 27. Many Rhode Island industries, especially the public utilities, have a goodly sprinkling of Technology men in their technical staffs. The gas company is no exception and has the liveliest representation of them all. Our present President, Larry Knowlton, '16, welcomed us as plant representative in the absence of R. L. Fletcher, '15.

We enjoyed a splendid dinner in the company dining room, followed by an interesting tour of the plant where we saw coal turned into coke, gas, and various other products. The company enjoys the reputation of having a model plant, and it is quite evident that they take a great deal of pride in maintaining an attractive as well as efficient layout in their buildings. The city is to be congratulated in having such a well-run plant. Mr. Knowlton, in his talk on gas, before starting the tour of the plant, stressed the part which Technology men and the Institute laboratories have played in the improvement of gas manufacture. He named several graduates who have been honored by the gas associations for their contributions toward perfection in this important modern fuel.

The December meeting of the Club usually takes the form of a bowling-tournament. Every able-bodied member of the Club usually is present at the T. K. Club, Pawtucket, for this spectacular contest. — WALTER C. WOOD, *Secretary*, 661 Westminister Street, Providence, R. I.

## *Southwestern Association of M. I. T.*

The regular monthly luncheon of the Southwestern Association of M. I. T. was held at the University Club on Wednesday, November 9. It was the first meeting at which the new officers have presided, and we were very highly gratified to have a good attendance. The following were present: J. C. Irwin, Jr., '18; William L. McPherrin, '14; Eltwed Pomeroy, '23; J. J. Falkenberg, '19; Major H. L. Robb, '21; John H. Driggs, '21; H. A. Rapelye, '08; A. T. Cushing, '11; G. W. Hall, Jr., '23; Bransford W. Crenshaw, '24; Charles E. Brown, '20; C. S. Timanus, '18; R. J. Sholtz, '22; C. M. Hardenbergh, '03; and a guest of Mr. Hardenbergh.

After the luncheon, Mr. Sholtz gave a short talk on the flour milling industry, and in the discussion that followed, Mr. Hardenbergh brought out some additional points. Mr. Hardenbergh is general manager of the Southwestern Milling Company in Kansas City, and Mr. Sholtz is associated with that company. We find that these short after-dinner talks by the members are very interesting and help us to get better acquainted, both with each other and with interesting problems we all run into in our various lines of work.

We, in this district, were pleased to note the number of new men entering Technology this fall from our territory, there being sixteen who had not been enrolled before. In this respect we rated sixth among all of the alumni club areas. It seems to indicate that the reputation of Technology as the premier scientific school of the country, and the advantages to be derived from going there are being more fully realized out here. We believe that our association was responsible for interesting some of these men in Technology, and we will carry on our missionary program this year. — BRANSFORD W. CRENSHAW, '24, *Secretary*, Henrici-Lowry Engineering Company, 402 Security Building, Kansas City, Mo.

## *Southeastern M. I. T. Association*

The sap may rise in the spring, but it takes the fall to bring out ye loyal sons of Technology. The monthly meeting of September was allowed to slip by as an obstinate weather man failed to loose the invigorating weather characteristic of fall, and ye key-board pounder was fulfilling the prized privilege of jurymen. Long may it exist!

A bit of scuffling during the early part of the third week in November, however, produced the creditable gathering of sixteen members, with but one follow-up notice on the phone, at a luncheon in the Tutwiler Hotel on Thursday. The method used was that of sending plain postals announcing the luncheon and admonishing the recipient that such notice was final. Most of the faces were familiar and represented classes from 1885 to 1926. The most recent addition to the fold is Joel Thompkins, '26, who is in the engineer-



ing department of the Alabama Power Company.

Rehashing of the Association's final blow-out in May was a tasteful method of renewing friendships, and, of course, vacation experiences are always odd if not interesting. The President, Prescott Kelly, '13, presided, nominally, but so little business was contracted, as usual, that there is some question as to whether the grads seize this monthly opportunity to disregard all etiquette of the table or to shake the paw of an ex-victim of Bostonian culture. At any rate, there is always an Institute spirit all its own which can only be conceived when "good fellows get together."

It seems that Sam Fletcher, '03, and the Reverend Kelly (he came originally from the famous Paul's race track location) of late have become addicted to the favorite pastime of the gents across the water for whom a statue of Johnny Walker should be unveiled. Sam was itching to broadcast some information on his game, and the man to his right succeeded in keeping him stuffed with food until the supply gave out, and then he burst forth. To make it impressive, he cited an analogous joke. Some one across the table retaliated, and Sam came back, but time halted everything.

An event with considerable Cardinal and Gray tint was the marriage of George J. Fertig, '24, and Rosamond Mills of Birmingham, solemnized October 15. Jimmy Walker, '24, came over from Atlanta to act as a groomsman and the Secretary also witnessed the "I do" at close hand. They will reside at 4301 Cliff Road in the future. — RUSSELL W. AMBACH, '24, Secretary, Alabama Power Company, Birmingham, Ala.

### *Montana Society of the M. I. T.*

With the first blush of Indian Summer (winter has not yet started) Charles W. Goodale, '75, chairman of our local alumni society, who has been residing in Boston, paid a visit to the state. As society reporters would say, "his visit was the inspiration" of two dinners, at both of which he was the honored guest.

As quickly as Mr. Goodale arrived in town he visited the undersigned and got him all hopped-up on doings Tech-wise at Cambridge and other points. Mr. Goodale attends all the meetings of the Alumni Council as does our regular representative, George A. Packard, '90, and the twain manage to keep us informed on everything that goes on at the meetings, even though some of these happenings are not fully printed in Dennie's mimeographed sheet.

Before we digressed, we started to talk about dinners and as that probably whetted your appetites here goes for number one.

[The report on Dinner Number Two will appear next month. — the Editors]

*Time:* November 8, 6:30 P.M. *Place:* Palm Room, Rainbow Hotel, Great Falls. *Girl:* None.

**CAST OF CHARACTERS.** *King:* Charles W. Goodale, '75. *Major Domo:* Albert E. Wiggin, '07, Chairman of Great Falls chapter of the Montana Society of the M. I. T. *Knights of Great Falls:* E. S. Bardwell, '06; George Bates, '04; E. C. Van Blarcom, '26; C. J.

Lundborg, '22. *Visiting Knights:* C. H. Burr, '02, Boston; E. J. Riley, '09, Spokane; W. R. Matthews, '21, Spokane.

**SYNOPSIS:** Major Domo calls knights together to man the festive board to the tune of several bucks per man, rather than per plate. For the next forty-five minutes there is much disturbance corresponding to modern static. At the end of the disturbance it is noted that all the victuals have disappeared from the board and Major Domo introduces King, with great acclaim and drawing of swords by knights.

King rises and states it is not his exact purpose to ask for donations for Technology, after which knights replace swords in sheaths and King makes the big speech of the evening. He tells of the building of dormitories at the home ranch in Cambridge, stating that about 400,000 shekels (at normal rate of exchange) have been subscribed in addition to the building donated and completed by the Class of 1893. He states that plans call for the building of dormitories to the amount of one million simoleons. (A simoleon is an ancient medium of exchange, which will be accepted by Bursar Horace S. Ford at a value of one dollar.) King states that donations are coming in for rooms, sections of dormitories, and in some cases plans are being made by classes, clubs, and so on, to donate entire units of forty rooms. While the dormitories will contain forty rooms each, A.E.F. men, contemplating sending their sons to Technology, should not have in mind the French phrase for which the "Forty and Eight" club was named.

After speech of king, Knights gather around to discuss ways and means; most of them are long in ways and short of means, so the discussion ends and the talk drifts to days at Technology. After a rousing demi-tasse bumper of thanks to King and Major Domo, the knights break up the meeting by singing, "We will beat our swords into oil shares and sell them to fair Harvard."

Before traveling from Great Falls to Butte, we desire to mention that one of our good Technology men, who always is on hand at meetings, R. H. Willcomb, '07, was unable to attend on account of the recent death of his father at Ipswich, Mass. To Mr. Willcomb and his relatives our sympathies are extended, with the hope that time, the healer of all wounds, will, in a measure, alleviate the grief caused by their heavy loss. — CARL J. TRAUERMAN, '07, Secretary, 25 East Broadway, Butte, Montana.

### *Technology Club of Chicago*

On Wednesday, November 30, the first Smoker of the 1927-28 season was held at 6:30 P.M. in The Electric Club. No pre-arranged speeches were scheduled as it was the intention of the committee to have the meeting as informal as possible. The plan was very successful as it resulted in a good evening meal with a splendid opportunity to move about and strengthen old friendships as well as to start new ones. Some of the more prominent alumni narrated anecdotes of their time at the Institute, and it was a treat to hear of conditions as they were in other days. This feature was not wholly a "way back when" recital, as the conditions that exist today were fully as interesting

to the old-timers as the history was to the cubs.

The officers of the Club are now working in collaboration with the vocational advisors of the technical high schools, so that any student interested in higher technical education can have an individual interview with an alumnus who is well qualified to inform him of the benefits of a Technology training for his prospective vocation. — J. F. DUFFY, '11, Secretary, A. E. White and Company, 19 South LaSalle Street, Chicago, Ill.

### *The M. I. T. Club of Western Pennsylvania*

The first meeting of the winter season was held Wednesday, November 9, in the University Club, with about forty members present. George W. Ousler, '16, President, told us of the plans for the year, which include a meeting a month, each month on the same date, the ninth, and the holding of another intercollegiate dinner similar to the one which was so successful last year, when the Technology Club invited alumni of all other colleges to participate in a dinner, and 600 attended. — A committee is already at work on plans for this year's affair which will be held sometime in the spring. George W. Whitwell, '15, is chairman.

The club again plans to name a candidate from this district for a regional scholarship at the Institute. R. W. Chandler, '12, is chairman of the scholarship committee. Considerable interest was aroused last year in the local secondary schools by the competition for the Rogers Prize, so called, in the first year of the existence of the competition. It is expected that the groundwork of education which was laid by last year's committee will result in the presentation of an even larger number of competitors for the prize this year.

In cognizance of the existence of a few and only a few dormitories at the Institute, a dormitory committee has been appointed with M. R. Scharff, '09, as chairman.

The club has changed the place of its weekly luncheons, and now meets in McCreery's restaurant, on the ninth floor of the department store of the same name. The time is unchanged, Friday at 12:15, and the urge to out of town visitors to meet there is as sincere as ever. — A. W. SKILLING, '21, Assistant Secretary, 507 Westinghouse Building, Pittsburgh, Penna.

### *Detroit Technology Association*

Our regular program of monthly dinners is now well under way, and so far we are pleased to note a decided increase in attendance, particularly among the younger graduates. The annual election of officers is scheduled for the next meeting. Plans are gradually taking shape for our annual dinner, at which time one of the large industries of Detroit will be chosen as the topic for consideration. In previous years these dinners have been known as Airplane Dinner, Automotive Dinner, Chemical Dinner and the like.

We are still on the lookout for visiting Technology men who happen to be in Detroit on our meeting dates, the first Monday of the month. — EVERETT F. DOTEN, '19, Secretary, 1217 Book Building, Detroit, Mich.

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# Books

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A review of recent volumes of interest to Technology men

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## *Backstairs Gossip of History*

OUR TIMES. VOLUME II. AMERICA FINDING HERSELF, by Mark Sullivan. \$5.00. xvii + 668 pages. New York: Charles Scribner's Sons.

WE as a people seem to be getting enormously interested in and self-conscious about our past. So long as we were certain of our future we were inclined to let the past slide, except for formal history, the kind that Mr. Ford stigmatized as 'bunk'. But with our growing self-consciousness and uncertainty about our present and future, we are scrabbling more and more in our folk literature, the informal backstairs gossip of history, as if sure of finding there the clue to all of which we are so doubtful. Our critics dig up half forgotten novelists like Melville; our poets, like Carl Sandburg, collect folk songs; our novelists write things like "The Grandmothers," the Harper's prize novel of the year. Our historians turn to sociology and Charles and Mary Beard give us the monumental "Rise of American Civilization." Even the stage is not happy unless it can dress its characters in the dreadful costumes of the nineties. And it is all fascinating material. One must imagine that Mr. Ford, even, could not call it bunk, so much and so splendidly is he a part of the record.

We are beginning to see, nowadays, that with the turn of the century and the coming of Theodore Roosevelt to the Presidency, America entered a new era. Some of us believe that he, more than any other, was the dynamo from which that new era drew its power. Certainly he was the symbol, if not the source, of the new energy. No history of the period can ignore, or should minimize that vital figure. Mark Sullivan, for many years a newspaper man interested in politics, seems to feel that he is the clue to much that went on in his times.

The present volume is a continuation to that history of "Our Times" which intends to give us the folk history of the past twenty-five years. One volume, "The Turn of the Century," has already been published, dealing with the American temper at the end of the nineties and our emergences on the large stage of the twentieth century. This present volume, a solid, copiously illustrated work, carries us half way through the first decade.

The most interesting, because most novel, section of the book is the first, some two hundred pages, nearly a third of the volume, dealing with the backgrounds of American popular culture since the Civil War. There are two ways of considering the sources of a people's ideas. Henry Adams said once that for a writer it was less important to reach five hundred thousand people directly than to reach the five hundred intellectual leaders who in turn would reach the nation. Mr. Sullivan goes on the assumption that that sort of influence is

far less important than the popular culture which the body of the people were steeped in throughout their early years and from which they never escaped. Therefore, this long section on the influences brought to bear on our folk by McGuffey's Fifth Readers, and other collections of readings and speeches, by the geographies of the times, by the mental arithmetics, by the scientific handbooks, and the rest. He believes that McGuffey inculcated moral lessons as well as a love for literature of a sort which marks our best known public men of the past generation. He believes that in every kind of school book, including geographies, physiologies, and chemistries, a kind of orthodox ethics was implicit which goes far to explain the present day strength of Fundamentalism and Prohibitionism, in short Puritanism. Not until after the turn of the century did European culture and ideas begin even to make a dent in the education of young people, and even then it remained almost entirely outside the curriculum. The inevitable result is the present day gulf, not merely of disagreement but of almost complete misunderstanding between the older orthodox generation and that which matured after 1905 or thereabouts, on all subjects which require a critical objectivity for their discussion.

This section is, to me at least, the most important and interesting in the book, and I believe that Mr. Sullivan proves his points thoroughly. He has been wise enough to depend, not on his own notions but upon the collected testimony of dozens of interested people who have put their personal experiences at his service.

The rest of the book is always interesting, though less original. The emergence of the young dude, Roosevelt, on the political scene, his displacement of Mark Hanna as Republican boss, and his astonishing growth in the early days of the presidency has all been done before, perhaps no better, yet as massed here it is a very impressive story. For so soon as Roosevelt attains his maturity as a leader of men, his story becomes the focal point of the great story of the decade. In these chapters, heavily documented, Mr. Sullivan is less entertaining but perhaps more solid. They tell the story of the development of the small private business into the trust, the rise of Standard Oil, the making of the United States Steel, the wars of the railroad giants, and the beginning of the trust prosecutions, to the anger and dismay of the elder Morgan. These chapters make the body of the book and are of the utmost importance in any story of modern America.

In addition, there are the chapters on the Crusade of Pure Food, from Upton Sinclair's "Jungle" to the passing of the Pure Food and Drugs Acts of Dr. Harvey Wiley, backed up by the President. Finally, we are told very amusingly the first attempts at heavier-than-air flight in America, the scientific and popular skepticism

(Continued on page 194)





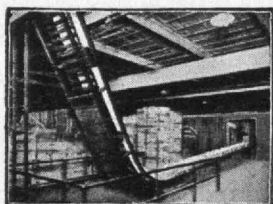
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both need behind-the-line support

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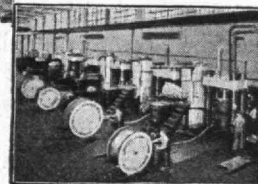
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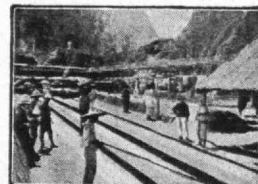
SINCE 1882 MANUFACTURERS FOR THE BELL SYSTEM



*Behind the lines at the great Western Electric cable shop.*



*Some idea of the men behind the machines behind the lines.*



*'Way behind the lines—selecting materials from far corners of the earth.*

*Cont. from page 102*

which the Wright Brothers overcame, after one of the outstanding scientists in America had announced pontifically that flying was impossible.

The last two chapters, to me at any rate, are the most amusing. They are the record, month by month, of all the important and curious and amusing things that happened in 1904 and 1905, the shoes and ships and sealing wax of history. Any one who has lived through them will heartily enjoy recalling them. The youngsters, looking upon this picture and on this, girls' clothes, for instance, in 1904 and 1927, will thank whatever gods they believe in that they were not taking notice in those days.

ROBERT E. ROGERS

### *The Urge to High Places*

THE STORY OF EVEREST, by Captain John Noel. \$4.00. 285 pages. Boston: *Little, Brown and Company*.

Thrice — in 1921, 1922 and 1924 — have Europeans attempted to scale Mt. Everest, mightiest of the Himalayas and loftiest in the world — a peak towering nearly 9,000 feet above Mt. McKinley, highest altitude of North America, and, heaping Pelion upon Ossa, over two and a half miles above Mont Blanc, the topmost pinnacle of Europe. Why do men yearn to scale it?

The author, who went "on his own" in disguise to Tibet in 1913 to seek out the passes that led to Everest and if possible to come to close quarters with the mountain, was turned back within forty miles of his goal. Later he became photographer of the 1922 and 1924 expeditions. He answers:

"There are many people who look upon mountaineering adventures and activities as a preposterous waste of human energy, involving unnecessary risks to life and limb. They are entitled to their opinion and may be left to lead their comfortable lives and to die in a bed. The fact remains that there are other men who feel an urge to the high places, men whose spiritual natures are drawn to them, irresistibly, and who there gain the spiritual sustenance their souls crave."

From the latter type came Mallory, Norton, Somervell, the two Bruces, Beetham, Irvine, Odell and others whose names are recorded in this book. Regardless of one's preference for dying in a bed or on a glacier, Captain Noel's story with his truly excellent photographs, forming as they do a fascinating record of hardships and tragedy beyond the ken of ordinary mortals, force the conclusion that there is a deal of truth in his assertion.

As if the mere act of breathing at a distance of five and a half miles above the sea were not enough of a difficulty, the road to Everest is beset by perplexing obstacles such as the religious scruples of the Tibetans. To them "Chomo Lungma" or "Goddess Mother of the World" is a holy mountain considered sacred to their gods and kept inviolate by their demons. No start could be made by way of Tibet without the permission of the Dalai Lama and the other possibility, through Nepal, was likewise closed by the objections of that government. Later the 1921 expedition definitely determined that the Nepalese route offered no access to Everest's summit, for on the south side the great precipice drops 14,000 feet to the Kangshung Glacier of Nepal.

Sir Charles Bell, the British Political Resident in

Sikkim, undertook negotiations at Lhasa and it was through his efforts that passports were at last obtained in 1920. Thus the way was opened but there remained complications which could be answered only at the risk of human life and by experimenting with the unknown.

The party knew at the start that they had but a short spring climbing season of perhaps seven or eight weeks, although the latitude is that of Florida. As Captain Noel puts it, "To climb Everest in the spring is to race against the monsoon." Could they prepare base and climbing depots and get ready to assault the pyramid of the peak in such a short period? Would the ultra-violet rays of the sun, so intense at high altitudes in the tropics, strike them down with mountain lassitude and sickness? And could they acclimatize themselves to stand up under the physical exertion of climbing in zero weather at 25,000 feet and upward?

The first expedition, that of 1921, was actually an exploratory and not a climbing venture. In his first public lecture in London upon his return from it, Mallory uttered this historic phrase, "The chances of a given party to reach the summit in a given time are fifty to one against."

But the war with the mountain was declared and so in 1922 the second expedition under Brigadier General C. B. Bruce of the Indian Army set out from Darjeeling, the little hill station 8,000 feet above the plains of Bengal. They followed the trade route of the Jelep Pass, up through the forests of Sikkim and across the tablelands of Tibet, for weeks toiling through a desolation of mountain and plateau until they stood before the highest monastery in the world — the Rongbuk lamasery — 16,000 feet above the level of the sea.

Nearby, at the snout of the Rongbuk glacier, fifteen miles from the summit, they established the base depot, to be used again on the 1924 expedition. The arduous labors of toting supplies to the upper camps, of exploring the Ice Cliff and snow fields and of the many hardships and attendant worries are recounted in impressive detail. All culminated in an accident which cost the lives of five porters and "with our porters shaken by their own losses and with the surviving climbers all exhausted, General Bruce felt it impossible to remain in Tibet during the monsoon and renew the struggle in the autumn. We had shot out bolt."

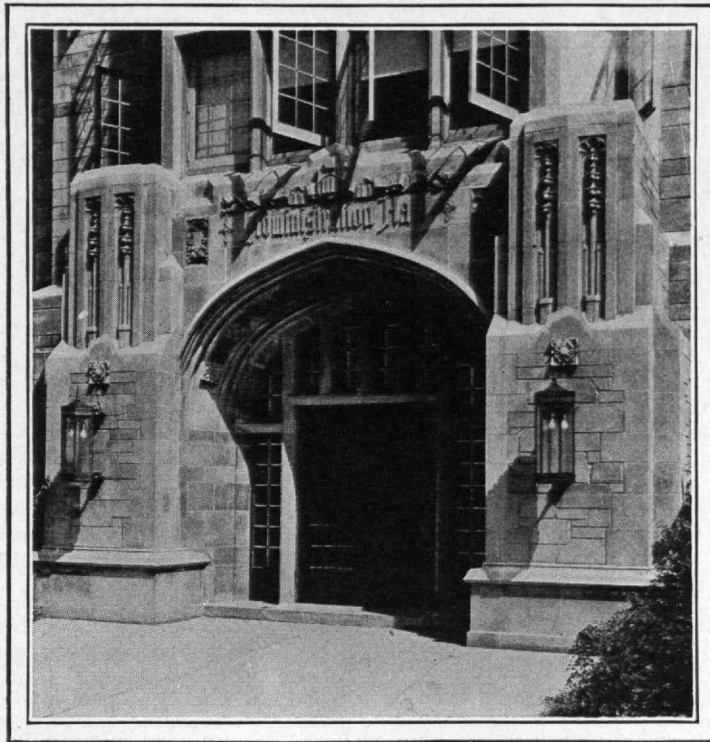
The next year went by, every moment of it busily spent in planning and equipping the new expedition of 1924. Although the main object was to be mountaineering, geographical work was to be undertaken. Geology, however, was forbidden. "The Tibetans earnestly begged us not to break the soil, nor loosen rocks" and "let the devils out of the ground."

Nevertheless the 1924 expedition did include a geologist, N. E. Odell, who was to live over twelve consecutive days at or above the North Col (four and a quarter miles elevation) and who was the last man to see Mallory and Irvine alive. Odell's story of that tragedy, as he told it in the presence of this reviewer last spring, is repeated and supplemented by Captain Noel.

It was June 6, 1924, when George Mallory and his young companion, Andrew Irvine, only twenty-two years old (Mallory was thirty-seven) determined to

*(Continued on page 196)*



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Continued from page 194

make the final attempt which cost their lives. Mallory had been on each of the other two expeditions, and he was not only the most experienced climber of the party but the time he had previously spent at the extremely high altitudes encountered on the upper slopes of Everest enabled him to become acclimatized more readily. Irvine, who had been taken along on the personal recommendation of Odell, had been a member of the Oxford Spitzbergen expedition.

On the day of the tragedy, Odell's function was that of support and he made the trip from the base camp to Camp Number Six (26,700 feet), from which point at noon he saw the two men silhouetted against the snow on top of the second step, approaching the final crest of the mountain and within 600 feet of the summit. They were making rapid progress and, although four hours behind schedule, Odell was not unduly alarmed, for he knew that the climb above where he saw them offered no technical difficulties. In the afternoon, after waiting some hours and making calls to guide their return, Odell returned to the next lower camp because Camp Number Six could hold only two people at the most. The next day he climbed again to the highest camp and found it exactly as he had left it. He thought it probable that one or both had reached the summit, but felt certain that they could not have survived the cold and exposure of the night. He spent all day searching and calling out, and at last wearied and exhausted, he descended in the late afternoon to the camp on the North Col, almost a mile below. The monsoon broke that night; the next day the mountain was impassable for the season. The third expedition had "shot its bolt" and could do nothing more than make its way back to India.

But some later expedition to the Roof-of-the-World country will assuredly fulfill the prophecy of Sir Francis Younghusband. He says, "The doom of Everest is sealed, for the simple and obvious reason that Man grows in wisdom and stature but the span of mountains is fixed. . . . She cannot learn from experience. She cannot rise to occasions; whereas she is beset by an adversary who has all these advantages over her. . . ."

H. E. L.

NAVIGATOR: A STORY OF NATHANIEL BOWDITCH OF SALEM, by Alfred Stanford. \$2.50. 308 pages. New York: William Morrow and Company.

How many know the story of the record-breaking trip of the *Putnam* from Java to Salem in 1802? How many know anything of Nathaniel Bowditch, the frail-bodied seaman whose genius for navigation made that record trip possible? Certainly all navigators and aviators know that indispensable book "The American Practical Navigator," by Bowditch, but how many of them ever heard the story of its preparation? And who, even after the Ask-Me-Another craze, knows who Elizabeth Boardman was, the slight wisp of a girl that Nathaniel loved so well, and who died so untimely? Who ever suspected that de Laplace's "Mechanique Celeste," that the work of Herschel, and of others of his ilk, was transmuted by a dreaming Salem sailor into a system of navigation that made possible the golden age of the clipper ship, that is still the standard used in all navigation?

The material of these questions is in this book, a novelization of the life of Bowditch. Need more be said to induce one to read it?

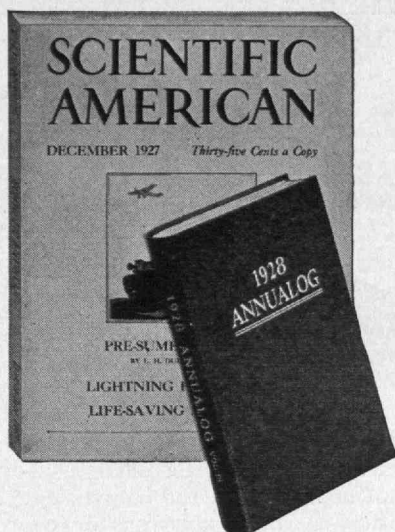
GENTLEMAN JOHNNY BURGOWNE, by Francis J. Hudleston. \$5.00. 367 pages. Indianapolis: The Bobbs-Merrill Company.

Mr. Hudleston is Librarian of the British War Office and after diligently searching its source material concludes: (1) John Burgoyne, risen from Cornet in His Majesty's 1st Dragoons to Lieutenant General, was a gentleman, and (2) Lord George Germain, court-martialed and cashiered under the name of Sackville for cowardice at Minden, to emerge subsequently from "the trapdoor of history" as Secretary of State for the American Colonies under George III, was anything but a gentleman. Furthermore, Lord George was a bungler, an unscrupulous scoundrel, an incompetent ass. In fact, Mr. Hudleston makes it quite clear that in his opinion Lord George rates pretty low.

Of the British commanders who fought and lost in North America during the Revolution, none had a more variegated and romantic career than John Burgoyne. He set out from Canada in 1777 with a force of 4,000 British regulars, supplemented by 3,000 Germans, 150

(Continued on page 199)





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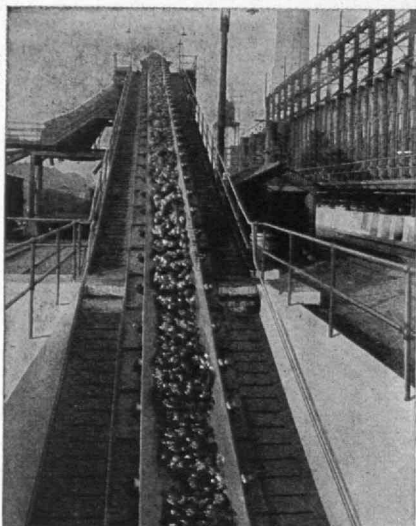
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*Continued from page 196*

Canadians and 500 Indians to march southward and effect a junction with Lord William Howe at Albany. By such a scheme the Colonies were to be torn asunder and choked to death.

Unfortunately for Burgoyne's contemporary reputation, but fortunately for the permanence of his name in history, he was destined to be the central figure of a British military disaster ranked as one of the fifteen decisive battles of the world.

That matters failed to work out as planned was because Germain, "the Minden man," neglected to send Lord Howe his orders and Howe marched south to capture Philadelphia instead of north toward Albany. Burgoyne troops met the Americans under Gates ("in two words, an intriguer and humbug," says Mr. Hudleston) and, largely due to Benedict Arnold and Morgan's Riflemen, the British were defeated and the "Articles of Convention" at Saratoga were signed.

Thus did Germain's indifference cost England her Colonies, for Saratoga was the beginning of the end.

George Bernard Shaw in his play, "The Devil's Disciple," imagines Gentlemen Johnny saying, "Your friend the British soldier can stand up to anything except the British War Office." Burgoyne had reason to think this way although he may not have expressed himself in these exact words. But if he could have foreseen that 150 years later the Librarian of that War Office would take the trouble to produce such a delightful biography to set his reputation straight with the world, he would surely have felt that Saratoga was not fought altogether in vain.

**DREAMS**, by Dr. Percy G. Stiles, '97. \$1.50. 80 pages. Cambridge: *Harvard University Press*.

Dr. Stiles, of the Harvard Medical School, has kept a diary or notebook of his dreams since 1897, the year he graduated from the Institute, and this book is compiled from that record. Together with the text are drawings of dream images. It is essentially a case book; it contains no idle theorizing, no nebulous explanation of the functioning of the subconscious.

To all readers of this unique and entertaining document will undoubtedly come one reaction: how similar are part of everybody's dreams! And this particular reader must agree with Dr. Stiles' conclusions that the "dreaming personality" as he knows it is egotistical, scornful, primitive, susceptible to unreasoning and crippling fear, and adolescent in sense. But also do we think pertinent his quotation from Havelock Ellis, "Dreams are real while they last — can we say more of life?"

The study of the nature of dreams would be aided a great deal if there were more recording of data such as Dr. Stiles has done. Why should not the diary of the dream personality of an interesting man be in a measure as interesting and important as the diary of his wakeful life? Think of what Samuel Pepys might have dreamed, or Beethoven, or Cellini, or Shakespeare, or Mayor Thompson of Chicago! And could their dreams be correlated with their waking selves?

**TWENTIETH CENTURY CRIMES**, by Frederick A. Mackenzie. \$3.00. 273 pages. Boston: *Little, Brown and Company*.

Newspaper work took the author, a student of criminology, to the scenes of seven murders and to the operating area of the late Abe Hummel, ex-member of the New York Bar. In this book he narrates in an entertaining style the stories of these selected cases, believing "the most effective method of stripping the glamor from great crimes is to tell the truth about them."

Eighteen chapters are apportioned as follows: seven to the Leopold-Loeb case of the summer of 1924; one to von Arbin and Krueger, who, in March, 1926, tied eight pounds of dynamite on the rear end of a Stockholm taxi and lit the fuse; four to the Houndsditch killings and Steinie Morrison (a portrait of this recidivist is the book's frontispiece as it is of a similar book, George Dilnot's "Celebrated Crimes" published in 1925 by Duffield and Company); three to the Rosenthal murder better known as the Becker case, with its attendant exposures of the rottenness of the New York Police department of fifteen years ago; three to Henri Landru, professional assassin.

Eight other chapters — five on Rasputin and three on the executions of Nicholas of Russia and his family — are the most striking ones of the book. In 1921, Mr. Mackenzie was commissioned by the *Chicago Daily News* to make his home in Russia and learn the truth about conditions there. His account of the murder of the Czar and his family is, according to the jacket blurb, based "on facts which he

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gathered at first hand in Ekaterinburg." While this must be somewhat of an exaggeration as the murders took place in July, 1918, much of his material was evidently procured from sources as close as "second hand" which proximity puts Mr. Mackenzie in a class almost by himself.

WINE AND THE WINE LANDS OF THE WORLD, by Frank Hedges Butler. \$4.50. 271 pages. New York: *Brentano*.

Charles II had sat seven years on the throne of England when Edmund Harris, an ancestor of the author, set up as a wine merchant in London. Mr. Harris "held the reins for sixty-six years, saw five monarchs out, and lived to be 100." The business has since been carried on by his heirs — a total record of almost 260 years in one family.

Two-thirds of Mr. Butler's book is given over to the wine-producing countries of the world and the beverages they produce, data which the author collected during many years of extremely pleasant wanderings. In his interpretation of "wine," Mr. Butler liberally includes whiskey, rum, saké, kava, and so on. Thus Scotland and Ireland, the West Indies, Japan, and the South Seas get mentioned but the United States is left severely alone, even though he does devote a chapter to the restrictive laws of Canada, Norway and Sweden.

Some portions of the book would be greatly improved by a little judicious editing, but Mr. Butler's comprehensive knowledge is so nearly irrefutable that such matters should not be quibbled over. Disappointment, however, must be registered because he omitted any mention of the superb drinking songs of Thomas Love Peacock from the chapter on "Drinking Songs and Verses."

A good index and a bibliography of 181 very good, good, and not so good "Vintages of the Twentieth Century" are included.

BALLYHOO, THE VOICE OF THE PRESS, by Silas Bent. \$3.00. 398 pages. New York: *Boni and Liveright*.

Silas Bent has done a bully piece of writing about the press, the best since Oswald Garrison Villard's "Some Newspapers and Newspaper-men." He believes that an active public opinion must be created to bring about improved newspapers. And not all of our present troubles are due to the terrible tabloids which are not so new a phase of American journalism as is commonly supposed.

YOUR MONEY'S WORTH, by Stuart Chase, '10, and F. J. Schlink. \$2.00. viii + 285 pages. New York: *The MacMillan Company*.

Messrs. Chase and Schlink find fault with modern advertising methods. Their book is intelligible, exciting, and even racy. It is jammed with data, most of which cannot be challenged. They advocate impartial bureaus to check up on advertisers' claims and protect the dear public from making the mistake of paying twelve dollars for six-dollar shoes.

OLD SOX ON TRUMPETING, by E. T. Gundlach. \$2.00. 362 pages. Chicago: *Consolidated Book Publishers, Inc.*

Mr. Gundlach's opus is puzzling indeed. It is hard to comprehend what it is all about. A "Publisher's Preface" has the temerity to label it "this intensely amusing yet serious satire, attacking the alleged 'bunk' in advertising," and the author announces he "had often been urged by his friends to compose such a manuscript." Perhaps some of his *real* friends are now struggling to amuse themselves by trying to read his serious obfuscations.

THE SEVEN SEALS OF SCIENCE, by Joseph Mayer. \$3.50. 444 pages. New York: *The Century Company*.

In this very readable and attractive volume Dr. Mayer makes a useful contribution to the current movement for popularizing the history of science. His special thesis is "that the sciences did not arise — and could not have arisen — simultaneously; that they form a well-defined structure with mathematics at the bottom, that each later science built upon those that went before, that psychology is only now in process of becoming established and that the social studies, if they are to be worthy of the name of science, must build upon the natural sciences and particularly upon geology, biology and psychology."

(Continued on page 203)



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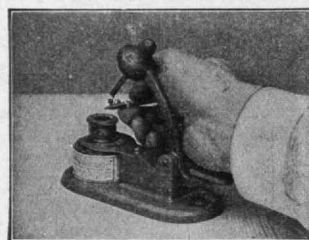
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MODERN ASTRONOMY, by Hector Macpherson. \$2.00. 195 pages. New York: *Oxford University Press, American Branch.*

The rise and progress of modern astronomy, the romance of its achievements and discoveries, is presented here in a well-organized and scholarly manner. The lay reader, untutored in the language and methods of science, may find it bewildering, so technical is its vocabulary and so scientific its allusiveness, but to men who can read the language of science and who would know the story of astronomy, the book will be interesting and valuable.

Two chapters are particularly well presented: *Cosmology* (the construction of the universe) and *Cosmogony* (the origin of the universe) give concisely the progress of thinking in these two fields. The books of George E. Hale, '90, "The New Heavens," "The Depths of the Universe," and "Beyond the Milky Way" treat the same subject more interestingly, stimulatingly, and recently, though more at random. Macpherson omits any mention of Millikan's cosmic rays and the theories as to their origin.

AROUND THE WORLD IN TWENTY-EIGHT DAYS, by Linton Wells. \$3.50. 276 pages. Boston: *Houghton, Mifflin Company.*

Edward S. Evans and Linton Wells left the Pulitzer Building, 63 Park Row, New York, at 1.30 A.M. on June 16, 1926, being checked out by Vilhjalmur Stefansson. When they got back twenty-eight days, fourteen hours, thirty-six minutes, and five seconds later they had spent \$32,000 and encircled the globe, lowering the thirteen-year-old record of John Henry Mears by seven days, six hours, fifty-eight minutes, and fifty-five seconds.

Evans, a Detroit business man and Lincoln Highway booster, several years ago was awarded a gold medal by the Canadian Government for having been the first to take an automobile under its own power from Winnipeg to the Pacific Coast. Wells is a newspaperman who writes good copy. Tearing around the earth, it seems, is a great experience — to look back on.

INTRODUCTION TO ORGANIC CHEMISTRY, by Roger J. Williams. \$3.50. 565 pages. New York: *D. Van Nostrand Co., Inc.*

Organic textbooks have been changing during recent years to include interpretations of organic reactions in the light of physico-chemical theories. The one at hand has introduced the electronic structure of the molecule and certain novel ionic considerations as an aid to the interpretations of organic reactions. The result is a fresh and stimulating work.

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In keeping with the modern trend references to the literature (mainly reviews) and to monographs in English are numerous. The special chapter on the use of chemical literature will be an aid to the reader of an inquiring disposition. Brief biographical footnotes are introduced frequently and are of considerable value, although the one, relating to our own Professor Crafts is in error. It is worth noticing that the Geneva system described represents the English interpretation rather than the American: thus *n*-butyl alcohol is named 1-butanol (p. 75) rather than butanol-1.

The typography of the book is particularly good. Graphical formulae are numerous and printed so that they stand out.

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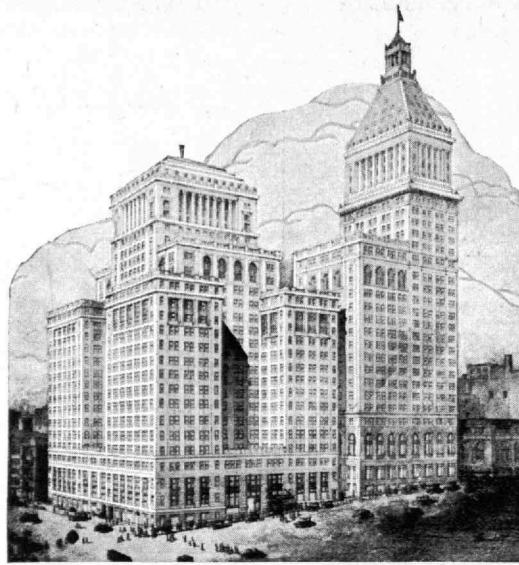
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## Capt. M. W. McIntyre CHOOSES JOHNSON HEAT CONTROL FOR THE UNION CENTRAL LIFE BUILDING ANNEX .. CINCINNATI

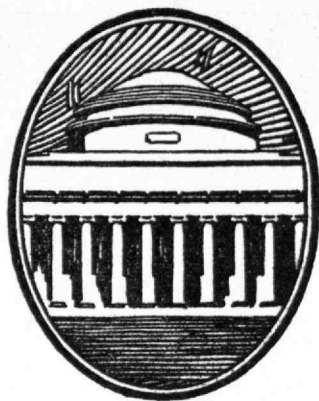
Significant in this is that Capt. M. W. McIntyre, with the cooperation of William E. Bodenstein, Consulting Engineer, made a severely thorough analysis of automatic temperature control and the different control systems. Final selection of The Johnson System of Heat Control was based on the definite economic value of automatic regulation, and the total practicability of The Johnson System. The building is an unusual test for automatic heat regulation. The ground floor and basement are a garage: heated and ventilated with unit heaters. The remainder of the building is devoted to offices, heated and ventilated by direct radiation and unit heaters. Basement and ground floor are controlled by Johnson Single Temperature Thermostats. Remainder of building is controlled by Johnson Dual (night and day) Thermostats. The fuel saving effected has been figured in dollars and cents: and it is estimated that The Johnson System will pay for itself in eight years, and continue every year after in its investment return—which is far greater than that from best stocks and bonds.

With Such Prominent Endorsement, Make Similar Survey As  
To Johnson Heat Control Value For *Your* Building. All De-  
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*All inquiries sent to the address below will receive prompt attention*

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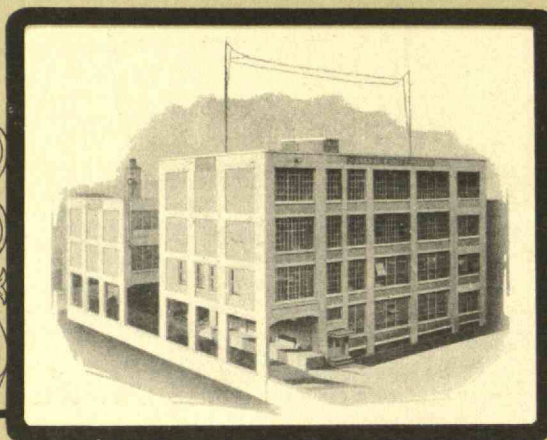
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